APPVION INC/SPRING MILL



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION AIR QUALITY PROGRAM

PLAN APPROVAL

Issue Date: June 28, 2016 Effective Date: June 28, 2016

Expiration Date: November 30, 2017

In accordance with the provisions of the Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, as amended, and 25 Pa. Code Chapter 127, the Owner, [and Operator if noted] (hereinafter referred to as permittee) identified below is authorized by the Department of Environmental Protection (Department) to construct, install, modify or reactivate the air emission source(s) more fully described in the site inventory list. This Facility is subject to all terms and conditions specified in this plan approval. Nothing in this plan approval relieves the permittee from its obligations to comply with all applicable Federal, State and Local laws and regulations.

The regulatory or statutory authority for each plan approval condition is set forth in brackets. All terms and conditions in this permit are federally enforceable unless otherwise designated as "State-Only" requirements.

Plan Approval No. 07-05001F

Federal Tax Id - Plant Code: 23-0385230-1

	Owner Information						
Name: APPVION INC. Mailing Address: 100 PAPER MILL RD							
ROARING SPRING, PA 16673-148	8						
	Plant Information						
Plant: APPVION INC/SPRING MILL							
Location: 07 Blair County	07803	Roaring Spring Borough					
SIC Code: 2621 Manufacturing - Paper Mills							
Responsible Official							
Name: PHILLIP P PACK							
Title: MILL MGR							
Phone: (814) 224 - 6618							
Plan Approval Contact Person							
Name: JANICE MHARTKORN							
Title: ASSOC ENV ENGR							
Phone: (814) 224 - 6504							
[Signature]							
WILLIAMR. WEAVER, SOUTHCENTRAL REGION AIR	Responsible Official Responsible Official Responsible Official Responsible Official						



APPVION INC/SPRING MILL



Plan Approval Description

This plan approval authorizes the following activity at the permittee's Spring Mill located in Roaring Spring Borough, Blair County:

- 1. The installation of a Lundberg* wet electrostatic precipitator (Source ID C036) to further control particulate matter (PM) emissions from the No. 3 Power Boiler (Source ID 036).
- 2. Modification of the existing venturi wet scrubber (Source ID C17) that controls PM and HCI emissions from the No. 3 Power Boiler. The scrubber modification addressed in the plan approval application consists of retrofitting the scrubber with a larger throat to allow for pressure differential control at a lower range than the current venturi throat allows. This is necessary due to the additional pressure differential requirements resulting from the wet electrostatic precipitator installation addressed in No. 1, above.
- 3. The construction and subsequent temporary operation of a fly ash handling system (Source ID 201) and the installation of an IAC* bin vent collector (Source ID C201) to control the fly ash storage silo's PM emissions.
- * or equivalent

In addition, the requirements of 40 CFR Part 63, Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters (MACT Subpart DDDDD) are detailed and annotated in Section D (Source ID 036).





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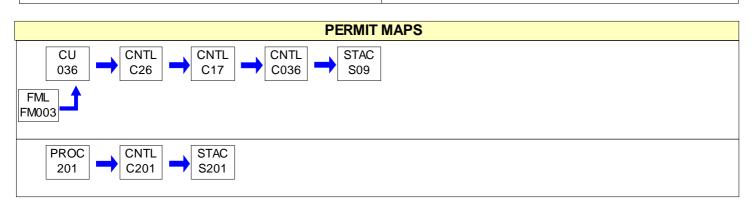
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SECTION A. Plan Approval Inventory List

Source I	D Source Name	Capacity	//Throughput	Fuel/Material
036	#3 POWER BOILER (COAL/BARK/SLUDGE/WOOD)	180.000	MMBTU/HR	
		3.960	Tons/HR	BITUMINOUS COAL
		4.250	Tons/HR	BARK WASTE
		2.220	Tons/HR	WWTP SLUDGE
			N/A	DIESEL/#2 OIL (START-UP)
			N/A	CARDBOARD (START-UP)
201	FLY ASH HANDLING SYSTEM	1.500	Tons/HR	FLY ASH
C036	WET ELECTROSTATIC PRECIPITATOR			
C17	API VAR. VENTURI FOR #3 POWER BOILER			
C201	SOURCE 201 BIN VENT COLLECTOR			
C26	BARRON IND. MULTICLONE FOR #3 POWER BOILER			
FM003	COAL/SLUDGE/BARK/WOOD STOCKPILE			
S09	#3 POW. BOILER STACK			
S201	SOURCE C201 STACK			





#001 [25 Pa. Code § 121.1]

Definitions

Words and terms that are not otherwise defined in this plan approval shall have the meanings set forth in Section 3 of the Air Pollution Control Act (35 P.S. § 4003) and 25 Pa. Code § 121.1.

#002 [25 Pa. Code § 127.12b (a) (b)]

Future Adoption of Requirements

The issuance of this plan approval does not prevent the future adoption by the Department of any rules, regulations or standards, or the issuance of orders necessary to comply with the requirements of the Federal Clean Air Act or the Pennsylvania Air Pollution Control Act, or to achieve or maintain ambient air quality standards. The issuance of this plan approval shall not be construed to limit the Department's enforcement authority.

#003 [25 Pa. Code § 127.12b]

Plan Approval Temporary Operation

This plan approval authorizes temporary operation of the source(s) covered by this plan approval provided the following conditions are met.

- (a) When construction, installation, modification, or reactivation is being conducted, the permittee shall provide written notice to the Department of the completion of the activity approved by this plan approval and the permittee's intent to commence operation at least five (5) working days prior to the completion of said activity. The notice shall state when the activity will be completed and when the permittee expects to commence operation. When the activity involves multiple sources on different time schedules, notice is required for the commencement of operation of each source.
- (b) Pursuant to 25 Pa. Code § 127.12b (d), temporary operation of the source(s) is authorized to facilitate the shakedown of sources and air cleaning devices, to permit operations pending the issuance of a permit under 25 Pa. Code Chapter 127, Subchapter F (relating to operating permits) or Subchapter G (relating to Title V operating permits) or to permit the evaluation of the air contaminant aspects of the source.
- (c) This plan approval authorizes a temporary operation period not to exceed 180 days from the date of commencement of operation, provided the Department receives notice from the permittee pursuant to paragraph (a), above.
- (d) The permittee may request an extension of the 180-day shakedown period if further evaluation of the air contamination aspects of the source(s) is necessary. The request for an extension shall be submitted, in writing, to the Department at least 15 days prior to the end of the initial 180-day shakedown period and shall provide a description of the compliance status of the source, a detailed schedule for establishing compliance, and the reasons compliance has not been established. This temporary operation period will be valid for a limited time and may be extended for additional limited periods, each not to exceed 180 days.
- (e) The notice submitted by the permittee pursuant to subpart (a) above, prior to the expiration of the plan approval, shall modify the plan approval expiration date on Page 1 of this plan approval. The new plan approval expiration date shall be 180 days from the date of commencement of operation.

#004 [25 Pa. Code § 127.12(a) (10)]

Content of Applications

The permittee shall maintain and operate the sources and associated air cleaning devices in accordance with good engineering practice as described in the plan approval application submitted to the Department.

#005 [25 Pa. Code §§ 127.12(c) and (d) & 35 P.S. § 4013.2]

Public Records and Confidential Information

- (a) The records, reports or information obtained by the Department or referred to at public hearings shall be available to the public, except as provided in paragraph (b) of this condition.
- (b) Upon cause shown by the permittee that the records, reports or information, or a particular portion thereof, but not emission data, to which the Department has access under the act, if made public, would divulge production or sales figures or methods, processes or production unique to that person or would otherwise tend to affect adversely the



competitive position of that person by revealing trade secrets, including intellectual property rights, the Department will consider the record, report or information, or particular portion thereof confidential in the administration of the act. The Department will implement this section consistent with sections 112(d) and 114(c) of the Clean Air Act (42 U.S.C.A. § § 7412(d) and 7414(c)). Nothing in this section prevents disclosure of the report, record or information to Federal, State or local representatives as necessary for purposes of administration of Federal, State or local air pollution control laws, or when relevant in a proceeding under the act.

#006 [25 Pa. Code § 127.12b]

Plan Approval terms and conditions.

[Additional authority for this condition is derived from 25 Pa. Code Section 127.13]

- (a) This plan approval will be valid for a limited time, as specified by the expiration date contained on Page 1 of this plan approval. Except as provided in § § 127.11a and 127.215 (relating to reactivation of sources; and reactivation), at the end of the time, if the construction, modification, reactivation or installation has not been completed, a new plan approval application or an extension of the previous approval will be required.
- (b) If construction has commenced, but cannot be completed before the expiration of this plan approval, an extension of the plan approval must be obtained to continue construction. To allow adequate time for departmental action, a request for the extension shall be postmarked at least thirty (30) days prior to the expiration date. The request for an extension shall include the following:
 - (i) A justification for the extension,
 - (ii) A schedule for the completion of the construction

If construction has not commenced before the expiration of this plan approval, then a new plan approval application must be submitted and approval obtained before construction can commence.

(c) If the construction, modification or installation is not commenced within 18 months of the issuance of this plan approval or if there is more than an 18-month lapse in construction, modification or installation, a new plan approval application that meets the requirements of 25 Pa. Code Chapter 127, Subchapter B (related to plan approval requirements), Subchapter D (related to prevention of significant deterioration of air quality), and Subchapter E (related to new source review) shall be submitted. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified.

#007 [25 Pa. Code § 127.32]

Transfer of Plan Approvals

- (a) This plan approval may not be transferred from one person to another except when a change of ownership is demonstrated to the satisfaction of the Department and the Department approves the transfer of the plan approval in writing.
- (b) Section 127.12a (relating to compliance review) applies to a request for transfer of a plan approval. A compliance review form shall accompany the request.
- (c) This plan approval is valid only for the specific source and the specific location of the source as described in the application.

#008 [25 Pa. Code § 127.12(4) & 35 P.S. § 4008 & § 114 of the CAA]

Inspection and Entry

- (a) Pursuant to 35 P.S. § 4008, no person shall hinder, obstruct, prevent or interfere with the Department or its personnel in the performance of any duty authorized under the Air Pollution Control Act.
- (b) The permittee shall also allow the Department to have access at reasonable times to said sources and associated air cleaning devices with such measuring and recording equipment, including equipment recording visual observations, as the Department deems necessary and proper for performing its duties and for the effective enforcement of the Air Pollution Control Act and regulations adopted under the act.



(c) Nothing in this plan approval condition shall limit the ability of the Environmental Protection Agency to inspect or enter the premises of the permittee in accordance with Section 114 or other applicable provisions of the Clean Air Act.

#009 [25 Pa. Code 127.13a]

Plan Approval Changes for Cause

This plan approval may be terminated, modified, suspended or revoked and reissued if one or more of the following applies:

- (a) The permittee constructs or operates the source subject to the plan approval in violation of the act, the Clean Air Act, the regulations promulgated under the act or the Clean Air Act, a plan approval or permit or in a manner that causes air pollution.
- (b) The permittee fails to properly or adequately maintain or repair an air pollution control device or equipment attached to or otherwise made a part of the source.
- (c) The permittee fails to submit a report required by this plan approval.
- (d) The Environmental Protection Agency determines that this plan approval is not in compliance with the Clean Air Act or the regulations thereunder.

#010 [25 Pa. Code §§ 121.9 & 127.216]

Circumvention

- (a) The permittee, or any other person, may not circumvent the new source review requirements of 25 Pa. Code Chapter 127, Subchapter E by causing or allowing a pattern of ownership or development, including the phasing, staging, delaying or engaging in incremental construction, over a geographic area of a facility which, except for the pattern of ownership or development, would otherwise require a permit or submission of a plan approval application.
- (b) No person may permit the use of a device, stack height which exceeds good engineering practice stack height, dispersion technique or other technique which, without resulting in reduction of the total amount of air contaminants emitted, conceals or dilutes an emission of air contaminants which would otherwise be in violation of this plan approval, the Air Pollution Control Act or the regulations promulgated thereunder, except that with prior approval of the Department, the device or technique may be used for control of malodors.

#011 [25 Pa. Code § 127.12c]

Submissions

Reports, test data, monitoring data, notifications shall be submitted to the:

Regional Air Program Manager
PA Department of Environmental Protection
(At the address given on the plan approval transmittal letter or otherwise notified)

#012 [25 Pa. Code § 127.12(9) & 40 CFR Part 68]

Risk Management

- (a) If required by Section 112(r) of the Clean Air Act, the permittee shall develop and implement an accidental release program consistent with requirements of the Clean Air Act, 40 CFR Part 68 (relating to chemical accident prevention provisions) and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act (P.L. 106-40).
- (b) The permittee shall prepare and implement a Risk Management Plan (RMP) which meets the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68 and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act when a regulated substance listed in 40 CFR § 68.130 is present in a process in more than the listed threshold quantity at the facility. The permittee shall submit the RMP to the Environmental Protection Agency according to the following schedule and requirements:
- (1) The permittee shall submit the first RMP to a central point specified by the Environmental Protection Agency no later than the latest of the following:



- (i) Three years after the date on which a regulated substance is first listed under § 68.130; or,
- (ii) The date on which a regulated substance is first present above a threshold quantity in a process.
- (2) The permittee shall submit any additional relevant information requested by the Department or the Environmental Protection Agency concerning the RMP and shall make subsequent submissions of RMPs in accordance with 40 CFR § 68.190.
- (3) The permittee shall certify that the RMP is accurate and complete in accordance with the requirements of 40 CFR Part 68, including a checklist addressing the required elements of a complete RMP.
- (c) As used in this plan approval condition, the term "process" shall be as defined in 40 CFR § 68.3. The term "process" means any activity involving a regulated substance including any use, storage, manufacturing, handling, or on-site movement of such substances or any combination of these activities. For purposes of this definition, any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, shall be considered a single process.

#013 [25 Pa. Code § 127.25]

Compliance Requirement

A person may not cause or permit the operation of a source subject to § 127.11 (relating to plan approval requirements), unless the source and air cleaning devices identified in the application for the plan approval and the plan approval issued to the source, are operated and maintained in accordance with specifications in the application and conditions in the plan approval issued by the Department. A person may not cause or permit the operation of an air contamination source subject to this chapter in a manner inconsistent with good operating practices.



I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

V. REPORTING REQUIREMENTS.

001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

- (a) The permittee shall submit semiannual reports to the Department regarding the project that is the subject of this plan approval. The reports shall be due on January 31 and July 31 of each year. The permittee shall continue submitting these reports until either:
- (1) the first plan approval extension application for the project has been submitted; or
- (2) the operating permit administrative amendment application has been submitted for the project; or
- (3) an operating permit initial or renewal application addressing the inclusion of this plan approval has been submitted for the facility.
- (b) The semiannual reports shall contain the following:
- (1) a brief summary of the status of the project, including any key construction milestones during the relevant semiannual period.
- (2) a statement of whether the equipment that is the subject of the plan approval has begun operating for any purpose, and what was the date that such operation began.
- (3) a statement of whether a plan approval extension is expected to be needed during the upcoming semiannual period, and if so, when the permittee anticipates submitting the application for such an extension.
- (c) The semiannual reports shall be sent to: Air Quality Program Manager, Department of Environmental Protection, Southcentral Regional Office, 909 Elmerton Avenue, Harrisburg, PA 17110-8200.
- (d) Within 60 days of the Department's written request to do so, the permittee shall submit either:
- (1) an initial state-only or Title V operating permit application for this facility, or
- (2) an administrative amendment application to incorporate the provisions of this plan approval into an existing state-only or Title V operating permit.



VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VII. ADDITIONAL REQUIREMENTS.

002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

All conditions contained in Title V Operating Permit No. 07-05001 remain in effect unless superseded or amended by conditions contained in this plan approval (P.A. No. 07-05001F). If there is a conflict between a condition contained in this plan approval and a condition contained in Title V Operating Permit No. 07-05001, the permittee shall comply with the condition contained in this plan approval.

VIII. COMPLIANCE CERTIFICATION.

No additional compliance certifications exist except as provided in other sections of this plan approval including Section B (relating to Plan Approval General Requirements).

IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.



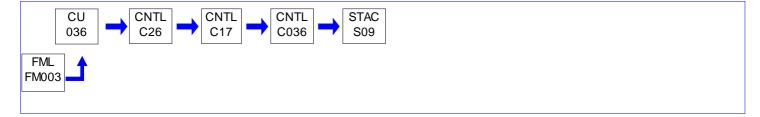
Source ID: 036 Source Name: #3 POWER BOILER (COAL/BARK/SLUDGE/WOOD)

Source Capacity/Throughput: 180.000 MMBTU/HR

3.960 Tons/HR BITUMINOUS COAL
4.250 Tons/HR BARK WASTE
2.220 Tons/HR WWTP SLUDGE

N/A DIESEL/#2 OIL (START-UP)
N/A CARDBOARD (START-UP)

Conditions for this source occur in the following groups: BOILER MACT 3



I. RESTRICTIONS.

Fuel Restriction(s).

001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

- (a) The permittee shall operate the Source ID 036 boiler using the following fuels: bituminous coal, bark waste or wastewater treatment plant (WWTP) sludge.
- (b) The permittee may operate the Source ID 036 boiler using cardboard or diesel/No. 2 fuel oil only during periods of startup, as defined in part (c), below.
- (c) Startup means:
- (1) Either the first-ever firing of fuel in the boiler for the purpose of supplying useful thermal energy for heating and/or producing electricity, or for any other purpose, or the firing of fuel in the boiler after a shutdown event for any purpose. Startup ends when any of the useful thermal energy from the boiler is supplied for heating, and/or producing electricity, or for any other purpose, or
- (2) The period in which operation of the boiler is initiated for any purpose. Startup begins with either the first-ever firing of fuel in the boiler for the purpose of supplying useful thermal energy (such as steam or heat) for heating, cooling or process purposes, or producing electricity, or the firing of fuel in the boiler for any purpose after a shutdown event. Startup ends four (4) hours after when the boiler supplies useful thermal energy (such as heat or steam) for heating, cooling, or process purposes, or generates electricity, whichever is earlier.

[Compliance with the requirement(s) specified in part (b) of this streamlined plan approval condition assures compliance with 40 CFR §63.7500(f)]

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).



IV. RECORDKEEPING REQUIREMENTS.

002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

- (a) The permittee shall maintain detailed records of all maintenance performed on the Source ID 036 boiler's venturi wet scrubber and wet electrostatic precipitator.
- (b) The permittee shall retain these records for a minimum of five (5) years and shall make them available to the Department upon its request.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The Source ID 036 boiler's venturi wet scrubber and wet electrostatic precipitator shall be:

- (a) Operated and maintained in a manner consistent with good operating and maintenance practices; and
- (b) Operated and maintained in accordance with the manufacturer's specifications.

004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall operate the Source ID 036 boiler's venturi wet scrubber and wet electrostatic precipitator at all times that the Source ID 036 boiler is operating, except during periods of startup and shutdown pursuant to Section E (Group BOILER MACT 3), Condition #008(f) [i.e., 40 CFR §63.7500(f), and Nos. (5) and (6) of Table 3 to MACT Subpart DDDDD].

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).



Source ID: 201 Source Name: FLY ASH HANDLING SYSTEM

Source Capacity/Throughput: 1.500 Tons/HR FLY ASH



I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §127.1]

Purpose.

Pursuant to the Best Available Technology (BAT) provisions of 25 Pa. Code §127.1, filterable and condensable particulate matter (PM), PM10, and PM2.5 emissions from Source ID 201's bin vent collector exhaust shall each not exceed 0.02 grain per dry standard cubic foot.

[Compliance with the requirement(s) specified in this streamlined plan approval condition assures compliance with the filterable PM emission limit specified in 25 Pa. Code §123.13(c)(1)(i)]

002 [25 Pa. Code §127.1]

Purpose.

Pursuant to the Best Available Technology (BAT) provisions of 25 Pa. Code §127.1, there shall be no visible air contaminant emissions from the exhaust of Source ID 201's bin vent collector other than water vapor or steam.

[Compliance with the requirement(s) specified in this streamlined plan approval condition assures compliance with the visible emission limit specified in 25 Pa. Code §123.41]

003 [25 Pa. Code §127.1]

Purpose.

Pursuant to the Best Available Technology (BAT) provisions of 25 Pa. Code §127.1, no fugitive air contaminant emissions shall be generated as a result of removing collected dust from Source ID 201's bin vent collector or as a result of subsequently handling the collected dust on-site following its removal from the bin vent collector.

[Compliance with the requirement(s) specified in this streamlined plan approval condition assures compliance with the fugitive emission limit specified in 25 Pa. Code §123.1(a)]

004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall limit Source ID 201's annual emissions to less than or equal to the following thresholds during any consecutive 12-month period:

- (a) 0.49 TPY of particulate matter (PM).
- (b) 0.49 TPY of PM-10 (particulate matter having an effective aerodynamic diameter less than or equal to a nominal 10 micron body).
- (c) 0.49 TPY of PM-2.5 (particulate matter having an effective aerodynamic diameter less than or equal to a nominal 2.5 micron body).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).





III. MONITORING REQUIREMENTS.

005 [25 Pa. Code §127.1]

Purpose.

Pursuant to the Best Available Technology (BAT) provisions of 25 Pa. Code §127.1, the permittee shall install, operate, and maintain instrumentation to continuously measure and display the pressure differential across Source ID 201's bin vent collector during silo loading operations.

IV. RECORDKEEPING REQUIREMENTS.

006 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

- (a) The permittee shall monitor and record the pressure differential across Source ID 201's bin vent collector. The pressure differential shall be recorded a minimum of once per week while Source ID 201 and its bin vent collector are operating.
- (b) The permittee shall retain these records for a minimum of five (5) years and shall make them available to the Department upon its request.

007 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

- (a) The permittee shall maintain detailed records of all maintenance performed on Source ID 201's bin vent collector.
- (b) The permittee shall retain these records for a minimum of five (5) years and shall make them available to the Department upon its request.

008 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

- (a) The permittee shall calculate the monthly air emissions from Source ID 201 using AP-42 emission factors, manufacturer-supplied emission factors, mass material balance, performance (stack) test data, or other method(s) acceptable to the Department. The permittee shall maintain records of the monthly air emissions.
- (b) The permittee shall calculate the cumulative Source ID 201 air emissions for each consecutive 12-month period. The permittee shall maintain records of the cumulative Source ID 201 air emissions for each consecutive 12-month period in order to demonstrate compliance with Condition #004, above.
- (c) The permittee shall retain these records for a minimum of five (5) years. The records shall be made available to the Department upon its request.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

009 [25 Pa. Code §127.1]

Purpose.

Pursuant to the Best Available Technology (BAT) provisions of 25 Pa. Code §127.1, Source ID 201's bin vent collector's compressed air supply shall be equipped with an air dryer and be designed to provide oil-free air.

010 [25 Pa. Code §127.1]

Purpose.

Pursuant to the Best Available Technology (BAT) provisions of 25 Pa. Code §127.1, the permittee shall operate Source ID 201's bin vent collector at all times that fly ash is being transferred to Source ID 201.

011 [25 Pa. Code §127.1]

Purpose.

Pursuant to the Best Available Technology (BAT) provisions of 25 Pa. Code §127.1, the permittee shall maintain on-site a



sufficient quantity of spare bin vent collector bags for Source ID 201's bin vent collector in order to immediately replace any bags requiring replacement due to deterioration resulting from routine operation.

012 [25 Pa. Code §127.1]

Purpose.

Pursuant to the Best Available Technology (BAT) provisions of 25 Pa. Code §127.1, Source ID 201 and its associated bin vent collector shall be:

- (a) Operated in such a manner as to not cause air pollution as that term is defined in the Air Pollution Control Act (35 P.S. §§4001 4015) and 25 Pa. Code §121.1;
- (b) Operated and maintained in a manner consistent with good operating and maintenance practices; and
- (c) Operated and maintained in accordance with the manufacturer's specifications.

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).



Group Name: BOILER MACT 3

Group Description: SOURCE SUBJECT TO MACT SUBPART DDDDD

Sources included in this group

ID Name

036 #3 POWER BOILER (COAL/BARK/SLUDGE/WOOD)

I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

II. TESTING REQUIREMENTS.

001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

- (a) Pursuant to 25 Pa. Code §139.3, at least 30 calendar days prior to commencing an emissions testing program, a test protocol shall be submitted to the Department for review and approval. The test protocol shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.
- (b) Pursuant to 25 Pa. Code §139.3, at least 15 calendar days prior to commencing an emissions testing program, notification as to the date and time of testing shall be given to the Southcentral Regional Office. Notification shall also be sent to the Bureau of Air Quality's Division of Source Testing and Monitoring. Notification shall not be made without prior receipt of a protocol acceptance letter from the Department.
- (c) Pursuant to 25 Pa. Code §139.53(a)(3), within 15 calendar days after completion of the on-site testing portion of an emissions test program, if a complete test report has not yet been submitted, an electronic mail notification shall be sent to the Department's Bureau of Air Quality's Division of Source Testing and Monitoring and the Southcentral Regional Office indicating the completion date of the on-site testing.
- (d) Pursuant to 25 Pa. Code §139.3, a complete test report shall be submitted to the Department no later than 60 calendar days after completion of the on-site testing portion of an emissions test program.
- (e) Pursuant to 25 Pa. Code §139.53(b), a complete test report shall include a summary of the emissions results on the first page of the report indicating if each pollutant measured is within permitted limits and a statement of compliance or non-compliance with all applicable plan approval/operating permit conditions. The summary results will include, at a minimum, the following information:
- (1) A statement that the owner or operator has reviewed the report from the emissions testing body and agrees with the findings.
- (2) Plan approval/operating permit number(s) and condition(s) which are the basis for the evaluation.
- (3) Summary of results with respect to each applicable plan approval/operating permit condition.
- (4) Statement of compliance or non-compliance with each applicable plan approval/operating permit condition.
- (f) Pursuant to 25 Pa. Code §139.3, all submittals shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.
- (g) All testing shall be performed in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department.
- (h) Pursuant to 25 Pa. Code §§139.53(a)(1) and 139.53(a)(3), all submittals, besides notifications, shall be accomplished through PSIMS*Online available through https://www.depgreenport.state.pa.us/ecomm/Login.jsp. If internet submittal can not be accomplished, three (3) copies of the submittal shall be sent to the Southcentral Regional Office at the following address, with deadlines verified through document postmarks:

PA DEP Southcentral Regional Office Air Quality Program 909 Elmerton Avenue



Harrisburg, PA 17110-8200

(i) The permittee shall ensure all federal reporting requirements contained in any applicable federal subpart are followed, including timelines more stringent than those contained herein. In the event of an inconsistency or any conflicting state and federal requirements, the most stringent provision, term, condition, method or rule shall be used by default.

MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VII. ADDITIONAL REQUIREMENTS.

[25 Pa. Code §127.12b]

Plan approval terms and conditions.

In the event that 40 CFR Part 63, Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters (MACT Subpart DDDDD) is revised, the permittee shall comply with the revised version of MACT Subpart DDDDD, and shall not be required to comply with any provisions in this plan approval designated as having MACT Subpart DDDDD as their authority, to the extent that such plan approval provisions would be inconsistent with the applicable provisions of the revised MACT Subpart DDDDD.

003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1]

Subpart A--General Provisions

Applicability.

The Group "BOILER MACT 3" power boiler is subject to 40 CFR Part 63, Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. The permittee shall comply with all applicable standards, compliance provisions, performance test, monitoring, record keeping, and reporting requirements contained at 40 CFR §§63.7480 through 63.7575, including all applicable portions of 40 CFR Part 63, Subpart A - General Provisions. The permittee shall comply with 40 CFR §63.13(a), which requires submission of copies of all requests, reports, applications, submittals, and other communications to both the U.S. Environmental Protection Agency (U.S. EPA) and the Department. The U.S. EPA copies shall be forwarded to:

Director Air Protection Division U.S. EPA, Region III (3AP00) 1650 Arch Street Philadelphia, PA 19103-2029

The Department copies shall be forwarded to:

Regional Air Program Manager PA Department of Environmental Protection 909 Elmerton Avenue Harrisburg, PA 17110-8200



004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7485]

Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters.

Am I subject to this subpart?

§63.7485 Am I subject to MACT Subpart DDDDD?

You are subject to MACT Subpart DDDDD if you own or operate an industrial, commercial, or institutional boiler or process heater as defined in §63.7575 that is located at, or is part of, a major source of HAP, except as specified in §63.7491. For purposes of MACT Subpart DDDDD, a major source of HAP is as defined in §63.2, except that for oil and natural gas production facilities, a major source of HAP is as defined in §63.7575.

[78 FR 7162, Jan. 31, 2013]

005 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7490]

Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters.

What is the affected source of this subpart?

§63.7490 What is the affected source of MACT Subpart DDDDD?

- (a) MACT Subpart DDDDD applies to new, reconstructed, and existing affected sources as described in paragraphs (a)(1) and (2), below.
- (1) The affected source of MACT Subpart DDDDD is the collection at a major source of all existing industrial, commercial, and institutional boilers and process heaters within a subcategory as defined in §63.7575.
- (2) [N/A THE BOILER IS DEFINED AS EXISTING PURSUANT TO PARAGRAPH (d), BELOW]
- (b) A boiler or process heater is new if you commence construction of the boiler or process heater after June 4, 2010 and you meet the applicability criteria at the time you commence construction.
- (c) A boiler or process heater is reconstructed if you meet the reconstruction criteria as defined in §63.2, you commence reconstruction after June 4, 2010 and you meet the applicability criteria at the time you commence reconstruction.
- (d) A boiler or process heater is existing if it is not new or reconstructed.
- (e) [N/A THE BOILER IS NOT DEFINED AS AN EGU]

[76 FR 15664, Mar. 21, 2011 as amended at 78 FR 7162, Jan. 31, 2013]

006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7495]

Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters.

When do I have to comply with this subpart?

§63.7495 When do I have to comply with MACT Subpart DDDDD?

- (a) [N/A THE BOILER IS DEFINED AS EXISTING PURSUANT TO §63.7490(d)]
- (b) If you have an existing boiler or process heater, you must comply with MACT Subpart DDDDD no later than January 31, 2016 except as provided in §63.6(i). [NOTE: THE RELEVANT COMPLIANCE DATE FOR THE BOILER IS JANUARY 31, 2017 PURSUANT TO SECTION E (BOILER MACT 3), CONDITION #001, OF TITLE V OPERATING PERMIT NO. 07-05001]
- (c) [N/A THE FACILITY IS ALREADY DEFINED AS A MAJOR SOURCE OF HAPs]
- (d) You must meet the notification requirements in §63.7545 according to the schedule in §63.7545 and in 40 CFR Part 63, Subpart A. Some of the notifications must be submitted before you are required to comply with the emission limits and work practice standards in MACT Subpart DDDDD.



- (e) [N/A THE BOILER IS SUBJECT TO MACT SUBPART DDDDD]
- (f) [N/A THE BOILER IS NOT DEFINED AS AN EGU]
- (g) [N/A THE BOILER IS SUBJECT TO MACT SUBPART DDDDD]
- (h) If you own or operate an existing industrial, commercial, or institutional boiler or process heater and have switched fuels or made a physical change to the boiler or process heater that resulted in the applicability of a different subcategory after the compliance date of MACT Subpart DDDDD, you must be in compliance with the applicable existing source provisions of MACT Subpart DDDDD on the effective date of the fuel switch or physical change.
- (i) [N/A THE BOILER IS DEFINED AS EXISTING PURSUANT TO §63.7490(d), ABOVE]

[76 FR 15664, Mar. 21, 2011 as amended at 78 FR 7162, Jan. 31, 2013; 80 FR 72807, Nov. 20, 2015]

007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7499]

Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters.

What are the subcategories of boilers and process heaters?

§63.7499 What are the subcategories of boilers and process heaters?

The subcategories of boilers and process heaters, as defined in §63.7575 are:

- (a) Pulverized coal/solid fossil fuel units.
- (b) Stokers designed to burn coal/solid fossil fuel.
- (c) Fluidized bed units designed to burn coal/solid fossil fuel.
- (d) Stokers/sloped grate/other units designed to burn kiln dried biomass/bio-based solid.
- (e) Fluidized bed units designed to burn biomass/bio-based solid.
- (f) Suspension burners designed to burn biomass/bio-based solid.
- (g) Fuel cells designed to burn biomass/bio-based solid.
- (h) Hybrid suspension/grate burners designed to burn wet biomass/bio-based solid.
- (i) Stokers/sloped grate/other units designed to burn wet biomass/bio-based solid. [NOTE: THE BOILER SATISFIES THE DEFINITION OF THIS SUBCATEGORY]
- (j) Dutch ovens/pile burners designed to burn biomass/bio-based solid.
- (k) Units designed to burn liquid fuel that are non-continental units.
- (I) Units designed to burn gas 1 fuels.
- (m) Units designed to burn gas 2 (other) gases.
- (n) Metal process furnaces.
- (o) Limited-use boilers and process heaters.
- (p) Units designed to burn solid fuel.
- (q) Units designed to burn liquid fuel.



- (r) Units designed to burn coal/solid fossil fuel.
- (s) Fluidized bed units with an integrated fluidized bed heat exchanger designed to burn coal/solid fossil fuel.
- (t) Units designed to burn heavy liquid fuel.
- (u) Units designed to burn light liquid fuel.

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7163, Jan. 31, 2013]

008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7500]

Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters.

What emission limits, work practice standards, and operating limits must I meet?

§63.7500 What emission limitations, work practice standards, and operating limits must I meet?

- (a) You must meet the requirements in paragraphs (a)(1) through (3), below, except as provided in paragraphs (b) through (e), below. You must meet these requirements at all times the affected unit is operating, except as provided in paragraph (f), below.
- (1) You must meet each emission limit and work practice standard in Tables 1 through 3, and 11 through 13 to MACT Subpart DDDDD that applies to your boiler or process heater, for each boiler or process heater at your source, except as provided under §63.7522. The output-based emission limits, in units of pounds per million BTU of steam output, in Tables 1 or 2 to MACT Subpart DDDDD are an alternative applicable only to boilers and process heaters that generate either steam, cogenerate steam with electricity, or both. The output-based emission limits, in units of pounds per megawatt-hour, in Tables 1 or 2 to MACT Subpart DDDDD are an alternative applicable only to boilers that generate only electricity. Boilers that perform multiple functions (cogeneration and electricity generation) or supply steam to common headers would calculate a total steam energy output using Equation 21 of §63.7575 to demonstrate compliance with the output-based emission limits, in units of pounds per million BTU of steam output, in Tables 1 or 2 to MACT Subpart DDDDD. If you operate a new boiler or process heater, you can choose to comply with alternative limits as discussed in paragraphs (a)(1)(i) through (iii), below, but on or after January 31, 2016, you must comply with the emission limits in Table 1 to MACT Subpart DDDDD. [NOTE: THE BOILER IS SUBJECT TO THE EMISSION LIMITS IN TABLE 2 AND THE WORK PRACTICE STANDARDS IN TABLE 3; THE EMISSION LIMITS IN TABLE 1, AS WELL AS THE ALTERNATIVE EMISSION LIMITS IN TABLES 11, 12 & 13, ARE NOT APPLICABLE; THE APPLICABLE REQUIREMENTS OF TABLES 2 & 3 TO MACT SUBPART DDDDD ARE LISTED BELOW]
 - (i) [N/A THE BOILER COMMENCED CONSTRUCTION ON OR BEFORE JUNE 4, 2010]
 - (ii) [N/A THE BOILER COMMENCED CONSTRUCTION BEFORE MAY 20, 2011]
 - (iii) [N/A THE BOILER COMMENCED CONSTRUCTION BEFORE DECEMBER 23, 2011]
- (2) You must meet each operating limit in Table 4 to MACT Subpart DDDDD that applies to your boiler or process heater. If you use a control device or combination of control devices not covered in Table 4 to MACT Subpart DDDDD, or you wish to establish and monitor an alternative operating limit or an alternative monitoring parameter, you must apply to the EPA Administrator for approval of alternative monitoring under §63.8(f). [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 4 TO MACT SUBPART DDDDD ARE LISTED BELOW]
- (3) At all times, you must operate and maintain any affected source (as defined in §63.7490), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
- (b) As provided in §63.6(g), EPA may approve use of an alternative to the work practice standards in this section (§63.7500).



- (c) [N/A THE BOILER IS NOT A LIMITED-USE BOILER]
- (d) [N/A THE BOILER HAS A HEAT INPUT CAPACITY GREATER THAN 5 mmBTU/hr AND IS IN THE "STOKERS/SLOPED GRATE/OTHER UNITS DESIGNED TO BURN WET BIOMASS/BIO-BASED SOLID" SUBCATEGORY
- (e) [N/A THE BOILER HAS A HEAT INPUT CAPACITY GREATER THAN OR EQUAL TO 10 mmBTU/hr AND IS IN THE "STOKERS/SLOPED GRATE/OTHER UNITS DESIGNED TO BURN WET BIOMASS/BIO-BASED SOLID" SUBCATEGORY]
- (f) These standards apply at all times the affected unit is operating, except during periods of startup and shutdown during which time you must comply only with Nos. (5) and (6) of Table 3 to MACT Subpart DDDDD.

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7163, Jan. 31, 2013; 80 FR 72807, Nov. 20, 2015]

Table 2 (Emission Limits for Existing Boilers and Process Heaters) to 40 CFR Part 63, Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

As stated in §63.7500, you must comply with the following applicable emission limits (units with heat input capacity of 10 mmBTU/hr or greater):

- (1) For units in all subcategories designed to burn solid fuel:
- (a) HCI = 0.022 lb/mmBTU of heat input, except during startup and shutdown (for Method 26A, collect a minimum of 1 dscm per run; for Method 26, collect a minimum of 120 liters per run); or
- HCI = 0.025 lb/mmBTU of steam output, except during startup and shutdown (for Method 26A, collect a minimum of 1 dscm per run; for Method 26, collect a minimum of 120 liters per run).
- (b) Mercury (Hg) = 0.0000057 lb/mmBTU of heat input, except during startup and shutdown (for Method 29, collect a minimum of 3 dscm per run; for Method 30A or M30B, collect a minimum sample as specified in the method; for ASTM D6784* collect a minimum of 3 dscm); or

Mercury (Hg) = 0.0000064 lb/mmBTU of steam output, except during startup and shutdown (for Method 29, collect a minimum of 3 dscm per run; for Method 30A or M30B, collect a minimum sample as specified in the method; for ASTM D6784* collect a minimum of 3 dscm).

- (7) For stokers/sloped grate/others designed to burn wet biomass fuel:
- (a) CO = 1,500 ppmvd corrected to 3% oxygen, except during startup and shutdown (3-run average; 1-hour minimum sampling time); or
- CO = 1.4 lb/mmBTU of steam output, except during startup and shutdown (3-run average; 1-hour minimum sampling time).
- (b) Filterable PM (FPM) = 0.037 lb/mmBTU of heat input, except during startup and shutdown (collect a minimum of 2 dscm per run); or total selected metals (TSM) = 0.00024 lb/mmBTU of heat input, except during startup and shutdown (collect a minimum of 2 dscm per run); or

FPM = 0.043 lb/mmBTU of steam output, except during startup and shutdown (collect a minimum of 2 dscm per run); or TSM = 0.00028 lb/mmBTU of steam output, except during startup and shutdown (collect a minimum of 2 dscm per run).

Footnotes:

* Incorporated by reference (see §63.14)



** An owner or operator may request an alternative test method under §63.7 in order that compliance with the carbon monoxide (CO) emissions limit be determined using carbon dioxide (CO2) as a diluent correction in place of oxygen at 3%. EPA Method 19 F-factors and EPA Method 19 equations must be used to generate the appropriate CO2 correction percentage for the fuel type burned in the unit, and must also take into account that the 3% oxygen correction is to be done on a dry basis. The alternative test method request must account for any CO2 being added to, or removed from, the emissions gas stream as a result of limestone injection, scrubber media, etc.

[78 FR 7195, Jan. 31, 2013, as amended at 80 FR 72821, Nov. 20, 2015]

Table 3 (Work Practice Standards) to 40 CFR Part 63, Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

As stated in §63.7500, you must comply with the following applicable work practice standards:

- (1) [N/A THE BOILER: IS NOT EQUIPPED WITH A CONTINUOUS OXYGEN TRIM SYSTEM; HAS A HEAT INPUT CAPACITY GREATER THAN 5 mmBTU/hr; AND IS IN THE "STOKERS/SLOPED GRATE/OTHER UNITS DESIGNED TO BURN WET BIOMASS/BIO-BASED SOLID" SUBCATEGORY]
- (2) [N/A THE BOILER HAS A HEAT INPUT CAPACITY GREATER THAN OR EQUAL TO 10 mmBTU/hr AND IS IN THE "STOKERS/SLOPED GRATE/OTHER UNITS DESIGNED TO BURN WET BIOMASS/BIO-BASED SOLID" SUBCATEGORY
- (3) For an existing boiler without a continuous oxygen trim system and with a heat input capacity of 10 mmBTU/hr or greater:

You must meet the following:

Conduct a tune-up of the boiler or process heater annually as specified in §63.7540. Units in either the Gas 1 or Metal Process Furnace subcategories will conduct this tune-up as a work practice for all regulated emissions under MACT Subpart DDDDD. Units in all other subcategories will conduct this tune-up as a work practice for dioxins/furans.

(4) For an existing boiler located at a major source facility, not including limited use units:

You must meet the following:

Must have a one-time energy assessment performed by a qualified energy assessor. An energy assessment completed on or after January 1, 2008 that meets or is amended to meet the energy assessment requirements in this table (Table 3 to MACT Subpart DDDDD) satisfies the energy assessment requirement. A facility that operated under an energy management program developed according to the ENERGY STAR guidelines for energy management or compatible with ISO 50001 for at least one year between January 1, 2008 and the compliance date specified in §63.7495 that includes the affected unit(s) also satisfies the energy assessment requirement. The energy assessment must include the following with extent of the evaluation for items (a) to (e) appropriate for the on-site technical hours listed in §63.7575:

- (a) A visual inspection of the boiler or process heater system.
- (b) An evaluation of operating characteristics of the boiler or process heater systems, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints.
- (c) An inventory of major energy use systems consuming energy from affected boilers and process heaters and which are under the control of the boiler/process heater owner/operator.
- (d) A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage.
- (e) A review of the facility's energy management program and provide recommendations for improvements consistent with the definition of energy management program, if identified.





- (f) A list of cost-effective energy conservation measures that are within the facility's control.
- (g) A list of the energy savings potential of the energy conservation measures identified.
- (h) A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time-frame for recouping those investments.
- (5) For an existing boiler subject to emission limits in Table 2 to MACT Subpart DDDDD during startup [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 2 TO MACT SUBPART DDDDD ARE LISTED ABOVE, UNDER §63.7500]:

You must meet the following:

- (a) You must operate all CMS during startup.
- (b) For startup of a boiler or process heater, you must use one or a combination of the following clean fuels: natural gas, synthetic natural gas, propane, other Gas 1 fuels, distillate oil, syngas, ultra-low sulfur diesel, fuel oil-soaked rags, kerosene, hydrogen, paper, cardboard, refinery gas, liquefied petroleum gas, clean dry biomass, and any fuels meeting the appropriate HCl, mercury and TSM emission standards by fuel analysis.
- (c) You have the option of complying using either of the following work practice standards.
- (1) If you choose to comply using definition (1) of "startup" in §63.7575, once you start firing fuels that are not clean fuels, you must vent emissions to the main stack(s) and engage all of the applicable control devices except limestone injection in fluidized bed combustion (FBC) boilers, dry scrubber, fabric filter, and selective catalytic reduction (SCR). You must start your limestone injection in FBC boilers, dry scrubber, fabric filter, and SCR systems as expeditiously as possible. Startup ends when steam or heat is supplied for any purpose, OR
- (2) If you choose to comply using definition (2) of "startup" in §63.7575, once you start to feed fuels that are not clean fuels, you must vent emissions to the main stack(s) and engage all of the applicable control devices so as to comply with the emission limits within four (4) hours of start of supplying useful thermal energy. You must engage and operate PM control within one hour of first feeding fuels that are not clean fuels*. You must start all applicable control devices as expeditiously as possible, but, in any case, when necessary to comply with other standards applicable to the source by a permit limit or a rule other than MACT Subpart DDDDD that require operation of the control devices. You must develop and implement a written startup and shutdown plan, as specified in §63.7505(e).
- (d) You must comply with all applicable emission limits at all times except during startup and shutdown periods at which time you must meet this work practice. You must collect monitoring data during periods of startup, as specified in §63.7535(b). You must keep records during periods of startup. You must provide reports concerning activities and periods of startup, as specified in §63.7555.
- (6) For an existing boiler subject to emission limits in Table 2 to MACT Subpart DDDDD during shutdown [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 2 TO MACT SUBPART DDDDD ARE LISTED ABOVE, UNDER §63.7500]:

You must meet the following:

- (a) You must operate all CMS during shutdown.
- (b) While firing fuels that are not clean fuels during shutdown, you must vent emissions to the main stack(s) and operate all applicable control devices, except limestone injection in FBC boilers, dry scrubber, fabric filter, and SCR but, in any case, when necessary to comply with other standards applicable to the source that require operation of the control device.
- (c) If, in addition to the fuel used prior to initiation of shutdown, another fuel must be used to support the shutdown process, that additional fuel must be one or a combination of the following clean fuels: natural gas, synthetic natural gas, propane, other Gas 1 fuels, distillate oil, syngas, ultra-low sulfur diesel, refinery gas, and liquefied petroleum gas.
- (d) You must comply with all applicable emissions limits at all times except for startup or shutdown periods conforming with this work practice. You must collect monitoring data during periods of shutdown, as specified in §63.7535(b). You



must keep records during periods of shutdown. You must provide reports concerning activities and periods of shutdown, as specified in §63.7555.

Footnote:

Heaters

* As specified in §63.7555(d)(13), the source may request an alternative time-frame with the PM controls requirement to the permitting authority (state, local, or tribal agency) that has been delegated authority for MACT Subpart DDDDD by U.S. EPA. The source must provide evidence that (1) it is unable to safely engage and operate the PM control(s) to meet the "fuel firing + 1 hour" requirement and (2) the PM control device is appropriately designed and sized to meet the filterable PM emission limit. It is acknowledged that there may be another control device that has been installed other than ESP that provides additional PM control (e.g., scrubber).

[78 FR 7198, Jan. 31, 2013, as amended at 80 FR 72823, Nov. 20, 2015]

Table 4 (Operating Limits for Boilers and Process Heaters) to 40 CFR Part 63, Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process

As stated in §63.7500, you must comply with the following applicable operating limits:

- (1) When complying with a Table 2 numerical emission limit using a wet particulate matter (PM) scrubber control on a boiler or process heater not using a PM continuous parameter monitoring system (CPMS), you must meet these operating limits: Maintain the 30-day rolling average pressure drop and the 30-day rolling average liquid flow rate at or above the lowest one-hour average pressure drop and the lowest one-hour average liquid flow rate, respectively, measured during the performance test demonstrating compliance with the PM emission limitation according to §63.7530(b) and Table 7 to MACT Subpart DDDDD. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 2 TO MACT SUBPART DDDDD ARE LISTED ABOVE, UNDER §63.7520, ALSO, THE APPLICABLE REQUIREMENTS OF TABLE 7 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7520, BELOW]
- (2) [N/A THE BOILER DOES NOT OPERATE A WET ACID GAS (HCI) SCRUBBER CONTROL AS DEFINED BY THIS TABLE SINCE THE SCRUBBER DOES NOT USE AN ALKALINE SLURRY/SOLUTION AS ITS SCRUBBING MEDIA; THE SCRUBBING MEDIA IS A WATER SOLUTION]
- (3) [N/A THE BOILER DOES NOT OPERATE A FABRIC FILTER CONTROL]
- (4) When complying with a Table 2 numerical emission limit using a electrostatic precipitator (ESP) control on a boiler or process heater not using a PM CPMS, you must meet these operating limits [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 2 TO MACT SUBPART DDDDD ARE LISTED ABOVE, UNDER §63.7500]:
- (a) [N/A THE BOILER DOES NOT OPERATE A DRY CONTROL SYSTEM (i.e., AN ESP WITHOUT A WET SCRUBBER)]
- (b) This option is only for boilers and process heaters not subject to PM CPMS or continuous compliance with an opacity limit (i.e., dry ESP). Maintain the 30-day rolling average total secondary electric power input of the ESP at or above the operating limits established during the performance test according to §63.7530(b) and Table 7 to MACT Subpart DDDDD. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 7 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7520, BELOW]
- (5) [N/A THE BOILER DOES NOT OPERATE A DRY SCRUBBER OR CARBON INJECTION CONTROL]
- (6) [N/A THE BOILER DOES NOT OPERATE A DRY CONTROL SYSTEM (i.e., A MULTICLONE WITHOUT A WET SCRUBBER)]
- (7) When complying with a Table 2 numerical emission limit using performance testing, you must meet these operating limits: For boilers and process heaters that demonstrate compliance with a performance test, maintain the 30-day rolling average operating load of each unit such that it does not exceed 110% of the highest hourly average operating load



recorded during the performance test. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 2 TO MACT SUBPART DDDDD ARE LISTED ABOVE, UNDER §63.7500]

- (8) When complying with a Table 2 numerical emission limit using an oxygen analyzer system, you must meet these operating limits: For boilers and process heaters subject to a CO emission limit that demonstrate compliance with an oxygen analyzer system as specified in §63.7525(a), maintain the 30-day rolling average oxygen content at or above the lowest hourly average oxygen concentration measured during the CO performance test, as specified in Table 8 to MACT Subpart DDDDD. This requirement does not apply to units that install an oxygen trim system since these units will set the trim system to the level specified in §63.7525(a). [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 2 TO MACT SUBPART DDDDD ARE LISTED ABOVE, UNDER §63.7540, BELOW]
- (9) [N/A THE BOILER DOES NOT OPERATE AN SO2 CEMS]

[80 FR 72874, Nov. 20, 2015]

009 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7505]

Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters.

What are my general requirements for complying with this subpart?

§63.7505 What are my general requirements for complying with MACT Subpart DDDDD?

- (a) You must be in compliance with the emission limits, work practice standards, and operating limits in MACT Subpart DDDDD. These emission and operating limits apply to you at all times the affected unit is operating except for the periods noted in §63.7500(f).
- (b) [Reserved]
- (c) You must demonstrate compliance with all applicable emission limits using performance stack testing, fuel analysis, or continuous monitoring systems (CMS), including a continuous emission monitoring system (CEMS), or particulate matter continuous parameter monitoring system (PM CPMS), where applicable. You may demonstrate compliance with the applicable emission limit for hydrogen chloride (HCI), mercury (Hg), or total selected metals (TSM) using fuel analysis if the emission rate calculated according to §63.7530(c) is less than the applicable emission limit. (For gaseous fuels, you may not use fuel analyses to comply with the TSM alternative standard or the HCl standard.) Otherwise, you must demonstrate compliance for HCl, mercury, or TSM using performance stack testing, if subject to an applicable emission limit listed in Tables 1, 2, or 11 through 13 to MACT Subpart DDDDD. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 2 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7500, ABOVE]
- (d) If you demonstrate compliance with any applicable emission limit through performance testing and subsequent compliance with operating limits through the use of CPMS, or with a CEMS or COMS, you must develop a site-specific monitoring plan according to the requirements in paragraphs (d)(1) through (4), below, for the use of any CEMS, COMS, or CPMS. This requirement also applies to you if you petition the EPA Administrator for alternative monitoring parameters under §63.8(f).
- (1) For each CMS required in this section (§63.7505), including CEMS, COMS, or CPMS, you must develop, and submit to the Administrator for approval upon request, a site-specific monitoring plan that addresses design, data collection, and the quality assurance and quality control elements outlined in §63.8(d) and the elements described in paragraphs (d)(1)(i) through (iii), below. You must submit this site-specific monitoring plan, if requested, at least 60 days before your initial performance evaluation of your CMS. This requirement to develop and submit a site specific monitoring plan does not apply to affected sources with existing CEMS or COMS operated according to the performance specifications under Appendix B to 40 CFR Part 60 and that meet the requirements of §63.7525. Using the process described in §63.8(f)(4), you may request approval of alternative monitoring system quality assurance and quality control procedures in place of those specified in this paragraph and, if approved, include the alternatives in your site-specific monitoring plan.
- (i) Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);



- (ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and
 - (iii) Performance evaluation procedures and acceptance criteria (e.g., calibrations, accuracy audits, analytical drift).
- (2) In your site-specific monitoring plan, you must also address paragraphs (d)(2)(i) through (iii), below.
- (i) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1)(ii), (c)(3), and (c)(4)(ii);
 - (ii) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and
- (iii) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c) (as applicable in Table 10 to MACT Subpart DDDDD), (e)(1), and (e)(2)(i).
- (3) You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.
- (4) You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.
- (e) If you have an applicable emission limit and you choose to comply using definition (2) of "startup" in §63.7575, you must develop and implement a written startup and shutdown plan (SSP) according to the requirements in Table 3 to MACT Subpart DDDDD. The SSP must be maintained on-site and available upon request for public inspection. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 3 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7500, ABOVE]

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7164, Jan. 31, 2013; 80 FR 72807, Nov. 20, 2015]

010 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7510]

Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters.

What are my initial compliance requirements and by what date must I conduct them?

§63.7510 What are my initial compliance requirements and by what date must I conduct them?

- (a) For each boiler or process heater that is required or that you elect to demonstrate compliance with any of the applicable emission limits in Tables 1 or 2 or 11 through 13 of MACT Subpart DDDDD through performance (stack) testing, your initial compliance requirements include all of the following [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 2 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7500, ABOVE]:
- (1) Conduct performance tests according to §63.7520 and Table 5 to MACT Subpart DDDDD. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 5 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7520, BELOW]
- (2) Conduct a fuel analysis for each type of fuel burned in your boiler or process heater according to §63.7521 and Table 6 to MACT Subpart DDDDD, except as specified in paragraphs (a)(2)(i) through (iii), below. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 6 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7521, BELOW]
 - (i) [N/A THE BOILER DOES NOT BURN A SINGLE TYPE OF FUEL]
 - (ii) [N/A THE BOILER DOES NOT BURN ANY GASEOUS FUELS]
 - (iii) [N/A THE BOILER DOES NOT BURN ANY GASEOUS FUELS]
- (3) Establish operating limits according to §63.7530 and Table 7 to MACT Subpart DDDDD. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 7 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7520, BELOW]
- (4) Conduct CMS performance evaluations according to §63.7525.
- (b) For each boiler or process heater that you elect to demonstrate compliance with the applicable emission limits in Tables 1 or 2 or 11 through 13 to MACT Subpart DDDDD for HCI, mercury, or TSM through fuel analysis, your initial



compliance requirement is to conduct a fuel analysis for each type of fuel burned in your boiler or process heater according to §63.7521 and Table 6 to MACT Subpart DDDDD and establish operating limits according to §63.7530 and Table 8 to MACT Subpart DDDDD. The fuels described in paragraph (a)(2)(i) and (ii), above, are exempt from these fuel analysis and operating limit requirements. The fuels described in paragraph (a)(2)(ii), above, are exempt from the chloride fuel analysis and operating limit requirements. Boilers and process heaters that use a CEMS for mercury or HCl are exempt from the performance testing and operating limit requirements specified in paragraph (a), above, for the HAP(s) for which CEMS are used. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 2 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7500, ABOVE; ALSO, THE APPLICABLE REQUIREMENTS OF TABLES 6 & 8 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7521 AND §63.7540, RESPECTIVELY, BELOW]

- (c) If your boiler or process heater is subject to a carbon monoxide (CO) limit, your initial compliance demonstration for CO is to conduct a performance test for CO according to Table 5 to MACT Subpart DDDDD or conduct a performance evaluation of your continuous CO monitor, if applicable, according to §63.7525(a). Boilers and process heaters that use a CO CEMS to comply with the applicable alternative CO CEMS emission standard listed in Tables 1, 2, or 11 through 13 to MACT Subpart DDDDD, as specified in §63.7525(a), are exempt from the initial CO performance testing and oxygen concentration operating limit requirements specified in paragraph (a), above. [NOTE: THE BOILER DOES NOT OPERATE A CO CEMS; ALSO, THE APPLICABLE REQUIREMENTS OF TABLE 2 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7500, ABOVE; ALSO, THE APPLICABLE REQUIREMENTS OF TABLE 5 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7520, BELOW]
- (d) If your boiler or process heater is subject to a PM limit, your initial compliance demonstration for PM is to conduct a performance test in accordance with §63.7520 and Table 5 to MACT Subpart DDDDD. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 5 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7520, BELOW]
- (e) For existing affected sources (as defined in §63.7490), you must complete the initial compliance demonstrations, as specified in paragraphs (a) through (d), above, no later than 180 days after the compliance date that is specified for your source in §63.7495 and according to the applicable provisions in §63.7(a)(2) as cited in Table 10 to MACT Subpart DDDDD, except as specified in paragraph (j), below. You must complete an initial tune-up by following the procedures described in §63.7540(a)(10)(i) through (vi) no later than the compliance date specified in §63.7495, except as specified in paragraph (j), below. You must complete the one-time energy assessment specified in Table 3 to MACT Subpart DDDDD no later than the compliance date specified in §63.7495. [NOTE: THE RELEVANT COMPLIANCE DATE FOR THE BOILER IS JANUARY 31, 2017 PURSUANT TO SECTION E (BOILER MACT 3), CONDITION #001, OF TITLE V OPERATING PERMIT NO. 07-05001; ALSO, THE APPLICABLE REQUIREMENTS OF TABLE 3 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7500, ABOVE]
- (f) [N/A THE BOILER IS DEFINED AS EXISTING PURSUANT TO §63.7490(d)]
- (g) [N/A THE BOILER IS DEFINED AS EXISTING PURSUANT TO §63.7490(d)]
- (h) [N/A THE BOILER DOES NOT BURN SOLID WASTE]
- (i) [N/A THE BOILER IS NOT DEFINED AS AN EGU]
- (j) [N/A THE BOILER HAS OPERATED BETWEEN THE MACT SUBPART DDDDD'S EFFECTIVE DATE AND THE COMPLIANCE DATE]
- (k) For affected sources, as defined in §63.7490, that switch subcategories consistent with §63.7545(h) after the initial compliance date, you must demonstrate compliance within 60 days of the effective date of the switch, unless you had previously conducted your compliance demonstration for this subcategory within the previous 12 months.

[78 FR 7164, Jan. 31, 2013, as amended at 80 FR 72808, Nov. 20, 2015]

011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7515]

Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters.

When must I conduct subsequent performance tests or fuel analyses?

§63.7515 When must I conduct subsequent performance tests, fuel analyses, or tune-ups?



- (a) You must conduct all applicable performance tests according to §63.7520 on an annual basis, except as specified in paragraphs (b) through (e), (g), and (h), below. Annual performance tests must be completed no more than 13 months after the previous performance test, except as specified in paragraphs (b) through (e), (g), and (h), below.
- (b) If your performance tests for a given pollutant for at least 2 consecutive years show that your emissions are at or below 75% of the emission limit (or, in limited instances as specified in Tables 1 and 2 or 11 through 13 to MACT Subpart DDDDD, at or below the emission limit) for the pollutant, and if there are no changes in the operation of the individual boiler or process heater or air pollution control equipment that could increase emissions, you may choose to conduct performance tests for the pollutant every third year. Each such performance test must be conducted no more than 37 months after the previous performance test. If you elect to demonstrate compliance using emission averaging under §63.7522, you must continue to conduct performance tests annually. The requirement to test at maximum chloride input level is waived unless the stack test is conducted for HCI. The requirement to test at maximum mercury input level is waived unless the stack test is conducted for mercury. The requirement to test at maximum TSM input level is waived unless the stack test is conducted for TSM. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 2 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7500, ABOVE]
- (c) If a performance test shows emissions exceeded the emission limit or 75% of the emission limit (as specified in Tables 1 and 2 or 11 through 13 to MACT Subpart DDDDD) for a pollutant, you must conduct annual performance tests for that pollutant until all performance tests over a consecutive 2-year period meet the required level (at or below 75% of the emission limit, as specified in Tables 1 and 2 or 11 through 13 to MACT Subpart DDDDD). [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 2 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7500, ABOVE]
- (d) If you are required to meet an applicable tune-up work practice standard, you must conduct an annual, biennial, or 5-year performance tune-up according to §63.7540(a)(10), (11), or (12), respectively. Each annual tune-up specified in §63.7540(a)(10) must be no more than 13 months after the previous tune-up. Each biennial tune-up specified in §63.7540(a)(11) must be conducted no more than 25 months after the previous tune-up. Each 5-year tune-up specified in §63.7540(a)(12) must be conducted no more than 61 months after the previous tune-up. For a new or reconstructed affected source (as defined in §63.7490), the first annual, biennial, or 5-year tune-up must be no later than 13 months, 25 months, or 61 months, respectively, after April 1, 2013 or the initial startup of the new or reconstructed affected source, whichever is later.
- (e) If you demonstrate compliance with the mercury, HCI, or TSM emission limit based on fuel analysis, you must conduct a monthly fuel analysis according to §63.7521 for each type of fuel burned that is subject to an emission limit in Tables 1, 2, or 11 through 13 to MACT Subpart DDDDD. You may comply with this monthly requirement by completing the fuel analysis any time within the calendar month as long as the analysis is separated from the previous analysis by at least 14 calendar days. If you burn a new type of fuel, you must conduct a fuel analysis before burning the new type of fuel in your boiler or process heater. You must still meet all applicable continuous compliance requirements in §63.7540. If each of 12 consecutive monthly fuel analyses demonstrates 75% or less of the compliance level, you may decrease the fuel analysis frequency to quarterly for that fuel. If any quarterly sample exceeds 75% of the compliance level or you begin burning a new type of fuel, you must return to monthly monitoring for that fuel until 12 months of fuel analyses are again less than 75% of the compliance level. If sampling is conducted on one day per month, samples should be no less than 14 days apart, but if multiple samples are taken per month, the 14-day restriction does not apply. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 2 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7500, ABOVE]
- (f) You must report the results of performance tests and the associated fuel analyses within 60 days after the completion of the performance tests. This report must also verify that the operating limits for each boiler or process heater have not changed or provide documentation of revised operating limits established according to §63.7530 and Table 7 to MACT Subpart DDDDD, as applicable. The reports for all subsequent performance tests must include all applicable information required in §63.7550. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 7 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7520, ABOVE]
- (g) For affected sources (as defined in §63.7490) that have not operated since the previous compliance demonstration and more than one year has passed since the previous compliance demonstration, you must complete the subsequent compliance demonstration, if subject to the emission limits in Tables 1, 2, or 11 through 13 to MACT Subpart DDDDD, no later than 180 days after the re-start of the affected source and according to the applicable provisions in §63.7(a)(2) as cited in Table 10 to MACT Subpart DDDDD. You must complete a subsequent tune-up by following the procedures described in §63.7540(a)(10)(i) through (vi) and the schedule described in §63.7540(a)(13) for units that are not operating at the time of



their scheduled tune-up. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 2 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7500, ABOVE]

- (h) [N/A THE BOILER IS IN THE "STOKERS/SLOPED GRATE/OTHER UNITS DESIGNED TO BURN WET BIOMASS/BIOBASED SOLID" SUBCATEGORY]
- (i) [N/A THE BOILER DOES NOT OPERATE A CO CEMS]

[78 FR 7165, Jan. 31, 2013, as amended at 80 FR 72808, Nov. 20, 2015]

012 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7520]

Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters.

What performance tests and procedures must I use?

§63.7520 What stack tests and procedures must I use?

- (a) You must conduct all performance tests according to §63.7(c), (d), (f), and (h). You must also develop a site-specific stack test plan according to the requirements in §63.7(c). You shall conduct all performance tests under such conditions as the Administrator specifies to you based on the representative performance of each boiler or process heater for the period being tested. Upon request, you shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests.
- (b) You must conduct each performance test according to the requirements in Table 5 to MACT Subpart DDDDD. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 5 TO MACT SUBPART DDDDD ARE LISTED BELOW]
- (c) You must conduct each performance test under the specific conditions listed in Tables 5 and 7 to MACT Subpart DDDDD. You must conduct performance tests at representative operating load conditions while burning the type of fuel or mixture of fuels that has the highest content of chlorine and mercury, and TSM if you are opting to comply with the TSM alternative standard and you must demonstrate initial compliance and establish your operating limits based on these performance tests. These requirements could result in the need to conduct more than one performance test. Following each performance test and until the next performance test, you must comply with the operating limit for operating load conditions specified in Table 4 to MACT Subpart DDDDD. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLES 5 & 7 TO MACT SUBPART DDDDD ARE LISTED BELOW; ALSO, THE APPLICABLE REQUIREMENTS OF TABLE 4 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7500, ABOVE]
- (d) You must conduct a minimum of three (3) separate test runs for each performance test required in this section (§63.7520), as specified in §63.7(e)(3). Each test run must comply with the minimum applicable sampling times or volumes specified in Tables 1 and 2 or 11 through 13 to MACT Subpart DDDDD. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 2 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7500, ABOVE]
- (e) To determine compliance with the emission limits, you must use the F-Factor methodology and equations in Sections 12.2 and 12.3 of EPA Method 19 at Appendix A-7 to 40 CFR Part 60 to convert the measured particulate matter (PM) concentrations, the measured HCl concentrations, the measured mercury concentrations, and the measured TSM concentrations that result from the performance test to lb/mmBTU heat input emission rates.
- (f) Except for a 30-day rolling average based on CEMS (or sorbent trap monitoring system) data, if measurement results for any pollutant are reported as below the method detection level (e.g., laboratory analytical results for one or more sample components are below the method defined analytical detection level), you must use the method detection level as the measured emissions level for that pollutant in calculating compliance. The measured result for a multiple component analysis (e.g., analytical values for multiple Method 29 fractions both for individual HAP metals and for total HAP metals) may include a combination of method detection level data and analytical data reported above the method detection level.

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7166, Jan. 31, 2013]

Table 5 (Performance Testing Requirements) to 40 CFR Part 63, Subpart DDDDD - National Emission Standards for



Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

As stated in §63.7520, you must comply with the following applicable requirements for performance testing for existing affected sources:

- (1) To conduct a performance test for filterable particulate matter (PM), you must perform the following activities:
- (a) Select sampling ports location and the number of traverse points using Method 1 at Appendix A-1 to 40 CFR Part 60.
- (b) Determine velocity and volumetric flow rate of the stack gas using Method 2, 2F or 2G at Appendix A-1 or A-2 to 40 CFR Part 60.
- (c) Determine oxygen or carbon dioxide concentration of the stack gas using Method 3A or 3B at Appendix A-2 to 40 CFR Part 60, or ANSI/ASME PTC 19.10–1981*.
- (d) Measure the moisture content of the stack gas using Method 4 at Appendix A-3 to 40 CFR Part 60.
- (e) Measure the filterable PM emission concentration using Method 5 or 17 (positive pressure fabric filters must use Method 5D) at Appendix A-3 or A-6 to 40 CFR Part 60.
- (f) Convert emissions concentration to lb/mmBTU emission rates using Method 19 F-factor methodology at Appendix A-7 to 40 CFR Part 60.
- (2) To conduct a performance test for total selected metals (TSM), you must perform the following activities:
- (a) Select sampling ports location and the number of traverse points using Method 1 at Appendix A-1 to 40 CFR Part 60.
- (b) Determine velocity and volumetric flow rate of the stack gas using Method 2, 2F or 2G at Appendix A-1 or A-2 to 40 CFR Part 60.
- (c) Determine oxygen or carbon dioxide concentration of the stack gas using Method 3A or 3B at Appendix A-2 to 40 CFR Part 60, or ANSI/ASME PTC 19.10–1981*.
- (d) Measure the moisture content of the stack gas using Method 4 at Appendix A-3 to 40 CFR Part 60.
- (e) Measure the TSM emission concentration using Method 29 at Appendix A-8 to 40 CFR Part 60.
- (f) Convert emissions concentration to lb/mmBTU emission rates using Method 19 F-factor methodology at Appendix A-7 to 40 CFR Part 60.
- (3) To conduct a performance test for hydrogen chloride (HCI), you must perform the following activities:
- (a) Select sampling ports location and the number of traverse points using Method 1 at Appendix A-1 to 40 CFR Part 60.
- (b) Determine velocity and volumetric flow rate of the stack gas using Method 2, 2F or 2G at Appendix A-1 or A-2 to 40 CFR Part 60.
- (c) Determine oxygen or carbon dioxide concentrations of the stack gas using Method 3A or 3B at Appendix A-2 to 40 CFR Part 60, or ANSI/ASME PTC 19.10–1981*.
- (d) Measure the moisture content of the stack gas using Method 4 at Appendix A-3 to 40 CFR Part 60.
- (e) Measure the HCI emission concentration using Method 26 or Method 26A at Appendix A-8 to 40 CFR Part 60.
- (f) Convert emissions concentration to lb/mmBTU emission rates using Method 19 F-factor methodology at Appendix A-7 to 40 CFR Part 60.



SECTION E.

Source Group Plan Approval Restrictions.

- (4) To conduct a performance test for mercury (Hg), you must perform the following activities:
- (a) Select sampling ports location and the number of traverse points using Method 1 at Appendix A-1 to 40 CFR Part 60.
- (b) Determine velocity and volumetric flow rate of the stack gas using Method 2, 2F or 2G at Appendix A-1 or A-2 to 40 CFR Part 60.
- (c) Determine oxygen or carbon dioxide concentration of the stack gas using Method 3A or 3B at Appendix A-2 to 40 CFR Part 60, or ANSI/ASME PTC 19.10–1981*.
- (d) Measure the moisture content of the stack gas using Method 4 at Appendix A-3 to 40 CFR Part 60.
- (e) Measure the Hg emission concentration using Method 29, 30A or 30B at Appendix A-8 to 40 CFR Part 60, or Method 101A at Appendix B to 40 CFR Part 61, or ASTM Method D6784*.
- (f) Convert emissions concentration to lb/mmBTU emission rates using Method 19 F-factor methodology at Appendix A-7 to 40 CFR Part 60.
- (5) To conduct a performance test for carbon monoxide (CO), you must perform the following activities:
- (a) Select sampling ports location and the number of traverse points using Method 1 at Appendix A-1 to 40 CFR Part 60.
- (b) Determine oxygen concentration of the stack gas using Method 3A or 3B at Appendix A-2 to 40 CFR Part 60, or ASTM D6522-00 (Reapproved 2005), or ANSI/ASME PTC 19.10–1981*.
- (c) Measure the moisture content of the stack gas using Method 4 at Appendix A-3 to 40 CFR Part 60.
- (d) Measure the CO emission concentration using Method 10 at Appendix A-4 to 40 CFR Part 60. Use a measurement span value of 2 times the concentration of the applicable emission limit.

Footnote:

* Incorporated by reference (see 40 CFR §63.14)

[78 FR 7198, Jan. 31, 2013, as amended at 80 FR 72823, Nov. 20, 2015]

Table 7 (Establishing Operating Limits*,**) to 40 CFR Part 63, Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

As stated in §63.7520, you must comply with the following requirements for establishing operating limits:

- (1)(a) If you have an applicable emission limit for PM, TSM or mercury, and your operating limits are based on wet scrubber operating parameters, you must establish a site-specific minimum scrubber pressure drop and minimum flow rate operating limit according to §63.7530(b) using data from the scrubber pressure drop and liquid flow rate monitors and the PM, TSM or mercury performance test according to the following requirements:
- (i) You must collect scrubber pressure drop and liquid flow rate data every 15 minutes during the entire period of the performance tests.
- (ii) Determine the lowest hourly average scrubber pressure drop and liquid flow rate by computing the hourly averages using all of the 15-minute readings taken during each performance test.
- (1)(b) If you have an applicable emission limit for PM, TSM or mercury, and your operating limits are based on electrostatic precipitator (ESP) operating parameters (option only for units that operate wet scrubbers), you must establish a site-specific minimum total secondary electric power input according to §63.7530(b) using data from the voltage and secondary



amperage monitors during the PM or mercury performance test according to the following requirements:

- (i) You must collect secondary voltage and secondary amperage for each ESP cell and calculate total secondary electric power input data every 15 minutes during the entire period of the performance tests.
- (ii) Determine the average total secondary electric power input by computing the hourly averages using all of the 15-minute readings taken during each performance test.
- (4) If you have an applicable emission limit for carbon monoxide (CO) for which compliance is demonstrated by a performance test, and your operating limits are based on oxygen (O2), you must establish a unit-specific limit for minimum O2 level according to §63.7530(b) using data from the O2 analyzer system specified in §63.7525(a) according to the following requirements:
- (a) You must collect oxygen data every 15 minutes during the entire period of the performance tests.
- (b) Determine the hourly average oxygen concentration by computing the hourly averages using all of the 15-minute readings taken during each performance test.
- (c) Determine the lowest hourly average established during the performance test as your minimum operating limit.
- (5) If you have an applicable emission limit for any pollutant for which compliance is demonstrated by a performance test, and your operating limits are based on boiler or process heater operating load, you must establish a unit-specific limit for maximum operating load according to §63.7520(c) using data from the operating load monitors or from steam generation monitors according to the following requirements:
- (a) You must collect operating load or steam generation data every 15 minutes during the entire period of the performance test.
- (b) Determine the average operating load by computing the hourly averages using all of the 15-minute readings taken during each performance test.
- (c) Determine the highest hourly average of the three (3) test run averages during the performance test, and multiply this by 1.1 (i.e., 110%) as your operating limit.
- * Operating limits must be confirmed or reestablished during performance tests.
- ** If you conduct multiple performance tests, you must set the minimum liquid flow rate and pressure drop operating limits at the higher of the minimum values established during the performance tests. For a minimum oxygen level, if you conduct multiple performance tests, you must set the minimum oxygen level at the lower of the minimum values established during the performance tests.

[80 FR 72827, Nov. 20, 2015]

013 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7521]

Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters.

What fuel analyses and procedures must I use?

§63.7521 What fuel analyses, fuel specification, and procedures must I use?

(a) For solid and liquid fuels, you must conduct fuel analyses for chloride and mercury according to the procedures in paragraphs (b) through (e), below, and Table 6 to MACT Subpart DDDDD, as applicable. For solid fuels and liquid fuels, you must also conduct fuel analyses for TSM if you are opting to comply with the TSM alternative standard. For gas 2 (other) fuels, you must conduct fuel analyses for mercury according to the procedures in paragraphs (b) through (e), below, and Table 6 to MACT Subpart DDDDD, as applicable. (For gaseous fuels, you may not use fuel analyses to comply with the TSM alternative standard or the HCl standard.) For purposes of complying with this section (§63.7521), a fuel gas system that consists of multiple gaseous fuels collected and mixed with each other is considered a single fuel type and sampling and analysis is only required on the combined fuel gas system that will feed the boiler or process heater. Sampling and



analysis of the individual gaseous streams prior to combining is not required. You are not required to conduct fuel analyses for fuels used for only startup, unit shutdown, and transient flame stability purposes. You are required to conduct fuel analyses only for fuels and units that are subject to emission limits for mercury, HCI, or TSM in Tables 1 and 2 or 11 through 13 to MACT Subpart DDDDD. Gaseous and liquid fuels are exempt from the sampling requirements in paragraphs (c) and (d), below. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 6 TO MACT SUBPART DDDDD ARE LISTED BELOW; ALSO, THE APPLICABLE REQUIREMENTS OF TABLE 2 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7500, ABOVE]

- (b) You must develop a site-specific fuel monitoring plan according to the following procedures and requirements in paragraphs (b)(1) and (2), below, if you are required to conduct fuel analyses as specified in §63.7510.
- (1) If you intend to use an alternative analytical method other than those required by Table 6 to MACT Subpart DDDDD, you must submit the fuel analysis plan to the Administrator for review and approval no later than 60 days before the date that you intend to conduct the initial compliance demonstration described in §63.7510.
- (2) You must include the information contained in paragraphs (b)(2)(i) through (vi), below, in your fuel analysis plan.
- (i) The identification of all fuel types anticipated to be burned in each boiler or process heater.
- (ii) For each anticipated fuel type, the notification of whether you or a fuel supplier will be conducting the fuel analysis.
- (iii) For each anticipated fuel type, a detailed description of the sample location and specific procedures to be used for collecting and preparing the composite samples if your procedures are different from paragraph (c) or (d), below. Samples should be collected at a location that most accurately represents the fuel type, where possible, at a point prior to mixing with other dissimilar fuel types.
- (iv) For each anticipated fuel type, the analytical methods from Table 6 to MACT Subpart DDDDD, with the expected minimum detection levels, to be used for the measurement of chlorine or mercury.
- (v) If you request to use an alternative analytical method other than those required by Table 6 to MACT Subpart DDDDD, you must also include a detailed description of the methods and procedures that you are proposing to use. Methods in Table 6 to MACT Subpart DDDDD shall be used until the requested alternative is approved.
- (vi) If you will be using fuel analysis from a fuel supplier in lieu of site-specific sampling and analysis, the fuel supplier must use the analytical methods required by Table 6 to MACT Subpart DDDDD.
- (c) You must obtain composite fuel samples for each fuel type according to the procedures in paragraph (c)(1) or (2), below, or the methods listed in Table 6 to MACT Subpart DDDDD, or use an automated sampling mechanism that provides representative composite fuel samples for each fuel type that includes both coarse and fine material. At a minimum, for demonstrating initial compliance by fuel analysis, you must obtain three composite samples. For monthly fuel analyses, at a minimum, you must obtain a single composite sample. For fuel analyses as part of a performance stack test, as specified in §63.7510(a), you must obtain a composite fuel sample during each performance test run.
- (1) If sampling from a belt (or screw) feeder, collect fuel samples according to paragraphs (c)(1)(i) and (ii), below.
- (i) Stop the belt and withdraw a 6-inch wide sample from the full cross-section of the stopped belt to obtain a minimum two pounds of sample. You must collect all the material (fines and coarse) in the full cross-section. You must transfer the sample to a clean plastic bag.
- (ii) Each composite sample will consist of a minimum of three samples collected at approximately equal one-hour intervals during the testing period for sampling during performance stack testing.
- (2) If sampling from a fuel pile or truck, you must collect fuel samples according to paragraphs (c)(2)(i) through (iii), below.
- (i) For each composite sample, you must select a minimum of five (5) sampling locations uniformly spaced over the surface of the pile.



- (ii) At each sampling site, you must dig into the pile to a uniform depth of approximately 18 inches. You must insert a clean shovel into the hole and withdraw a sample, making sure that large pieces do not fall off during sampling; use the same shovel to collect all samples.
 - (iii) You must transfer all samples to a clean plastic bag for further processing.
- (d) You must prepare each composite sample according to the procedures in paragraphs (d)(1) through (7), below.
- (1) You must thoroughly mix and pour the entire composite sample over a clean plastic sheet.
- (2) You must break large sample pieces (e.g., larger than 3 inches) into smaller sizes.
- (3) You must make a pie shape with the entire composite sample and subdivide it into four equal parts.
- (4) You must separate one of the guarter samples as the first subset.
- (5) If this subset is too large for grinding, you must repeat the procedure in paragraph (d)(3), above, with the quarter sample and obtain a one-quarter subset from this sample.
- (6) You must grind the sample in a mill.
- (7) You must use the procedure in paragraph (d)(3), above, to obtain a one-quarter subsample for analysis. If the quarter sample is too large, subdivide it further using the same procedure.
- (e) You must determine the concentration of pollutants in the fuel (mercury and/or chlorine and/or TSM) in units of pounds per million BTU (lb/mmBTU) of each composite sample for each fuel type according to the procedures in Table 6 to MACT Subpart DDDDD, for use in Equations 7, 8, and 9 of MACT Subpart DDDDD.
- (f) [N/A THE BOILER DOES NOT BURN ANY GASEOUS FUELS]
- (g) [N/A THE BOILER DOES NOT BURN ANY GASEOUS FUELS]
- (h) [N/A THE BOILER DOES NOT BURN ANY GASEOUS FUELS]
- (i) [N/A THE BOILER DOES NOT BURN ANY GASEOUS FUELS]

[78 FR 7167, Jan. 31, 2013, as amended at 80 FR 72808, Nov. 20, 2015]

Table 6 (Fuel Analysis Requirements) to 40 CFR Part 63, Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

As stated in §63.7521, you must comply with the following requirements for fuel analysis testing for existing affected sources. However, equivalent methods (as defined in §63.7575) may be used in lieu of the prescribed methods at the discretion of the source owner or operator.

- (1) To conduct a fuel analysis for mercury, you must perform the following activities:
- (a) Collect fuel samples using the procedure in §63.7521(c) or ASTM D5192*, or ASTM D7430*, or ASTM D6883*, or ASTM D2234/D2234M* (for coal) or ASTM D6323* (for solid), or ASTM D4177* (for liquid), or ASTM D4057* (for liquid), or equivalent.
- (b) Composite fuel samples using the procedure in §63.7521(d) or equivalent.
- (c) Prepare composited fuel samples using EPA SW-846-3050B* (for solid samples), ASTM D2013/D2013M* (for coal), ASTM D5198* (for biomass), or EPA 3050* (for solid fuel), or EPA 821-R-01-013* (for liquid or solid), or equivalent.



- (d) Determine heat content of the fuel type using ASTM D5865* (for coal) or ASTM E711* (for biomass), or ASTM D5864* (for liquids and other solids), or ASTM D240* or equivalent.
- (e) Determine moisture content of the fuel type using ASTM D3173*, ASTM E871*, or ASTM D5864*, or ASTM D240*, or ASTM D95* (for liquid fuels), or ASTM D4006* (for liquid fuels), or equivalent.
- (f) Measure mercury concentration in fuel sample using ASTM D6722* (for coal), EPA SW-846-7471B* or EPA 1631 or EPA 1631E (for solid samples), or EPA SW-846-7470A* (for liquid samples), or EPA 821-R-01-013 (for liquid or solid), or equivalent.
- (g) Convert concentration into units of pounds of mercury per mmBTU of heat content (lb Hg/mmBTU) using Equation 8 in §63.7530.
- (2) To conduct a fuel analysis for hydrogen chloride (HCI), you must perform the following activities:
- (a) Collect fuel samples using the procedure in §63.7521(c) or ASTM D5192*, or ASTM D7430*, or ASTM D6883*, or ASTM D2234/D2234M* (for coal) or ASTM D6323* (for coal or biomass), or ASTM D4177* (for liquid), or ASTM D4057* (for liquid), or equivalent.
- (b) Composite fuel samples using the procedure in §63.7521(d) or equivalent.
- (c) Prepare composited fuel samples using EPA SW-846-3050B* (for solid samples), ASTM D2013/D2013M* (for coal), ASTM D5198* (for biomass), or EPA 3050*, or equivalent.
- (d) Determine heat content of the fuel type using ASTM D5865* (for coal) or ASTM E711* (for biomass), or ASTM D5864*, or ASTM D240*, or equivalent.
- (e) Determine moisture content of the fuel type using ASTM D3173* or ASTM E871*, or ASTM D5864*, or ASTM D240*, or ASTM D95* (for liquid fuels), or ASTM D4006* (for liquid fuels), or equivalent.
- (f) Measure chlorine concentration in fuel sample using EPA SW-846-9250*, ASTM 6721*, ASTM D4208* (for coal), or EPA SW-846-9050* or ASTM E776* (for solid fuel), or EPA SW-846-9056* or SW-846-9076* (for solids or liquids), or equivalent.
- (g) Convert concentration into units of pounds of HCl per mmBTU of heat content (lb HCl/mmBTU) using, for fuel mixtures, Equation 7 in §63.7530 and convert from chlorine to HCl by multiplying by 1.028.
- (4) To conduct a fuel analysis for total selected metals (TSM), you must perform the following activities:
- (a) Collect fuel samples using the procedure in §63.7521(c) or ASTM D5192*, or ASTM D7430*, or ASTM D6883*, or ASTM D2234/D2234M* (for coal) or ASTM D6323* (for coal or biomass), or ASTM D4177* (for liquid), or ASTM D4057* (for liquid), or equivalent.
- (b) Composite fuel samples using the procedure in §63.7521(d) or equivalent.
- (c) Prepare composited fuel samples using EPA SW-846-3050B* (for solid samples), ASTM D2013/D2013M* (for coal), ASTM D5198* or TAPPI (for biomass), or EPA 3050*, or equivalent.
- (d) Determine heat content of the fuel type using ASTM D5865* (for coal) or ASTM E711* (for biomass), or ASTM D5864* (for liquids and other solids), or ASTM D240*, or equivalent.
- (e) Determine moisture content of the fuel type using ASTM D3173* or ASTM E871*, or ASTM D5864*, or ASTM D240*, or ASTM D95* (for liquid fuels), or ASTM D4006* (for liquid fuels), or ASTM D4177* (for liquid fuels) or ASTM D4057* (for liquid fuels), or equivalent.
- (f) Measure TSM concentration in fuel sample using ASTM D3683*, or ASTM D4606*, or ASTM D6357*, or EPA 200.8*, or EPA SW-846-6020*, or EPA SW-846-6020A*, or EPA SW-846-6010C*, EPA 7060* or EPA 7060A* (for arsenic only), or EPA SW-846-7740* (for selenium only).



(g) Convert concentration into units of pounds of TSM per mmBTU of heat content (lb TSM/mmBTU) using, for fuel mixtures, Equation 9 in §63.7530.

Footnote:

* Incorporated by reference (see 40 CFR §63.14)

[78 FR 7198, Jan. 31, 2013, as amended at 80 FR 72823, Nov. 20, 2015]

014 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7522]

Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters.

Can I use emission averaging to comply with this subpart?

§63.7522 Can I use emissions averaging to comply with MACT Subpart DDDDD?

- (a) As an alternative to meeting the requirements of §63.7500 for PM (or TSM), HCI, or mercury on a boiler or process heater-specific basis, if you have more than one existing boiler or process heater in any subcategories located at your facility, you may demonstrate compliance by emissions averaging if your averaged emissions are not more than 90% of the applicable emission limit, according to the procedures in this section (§63.7522). You may not include new boilers or process heaters in an emissions average.
- (b) For a group of two or more existing boilers or process heaters in the same subcategory that each vent to a separate stack, you may average PM (or TSM), HCI, or mercury emissions among existing units to demonstrate compliance with the limits in Table 2 to MACT Subpart DDDDD as specified in paragraph (b)(1) through (3), below, if you satisfy the requirements in paragraphs (c) through (g), below. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 2 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7500, ABOVE]
- (1) [N/A THE BOILER DOES NOT OPERATE ANY CEMS OR A PM CPMS]
- (2) For mercury and HCI, averaging is allowed as follows:
- (i) You may average among units in any of the solid fuel subcategories.
- (ii) [N/A THE BOILER IS IN THE "STOKERS/SLOPED GRATE/OTHER UNITS DESIGNED TO BURN WET BIOMASS/BIOBASED SOLID" SUBCATEGORY]
- (iii) [N/A THE BOILER IS IN THE "STOKERS/SLOPED GRATE/OTHER UNITS DESIGNED TO BURN WET BIOMASS/BIOBASED SOLID" SUBCATEGORY]
- (iv) [N/A THE BOILER IS IN THE "STOKERS/SLOPED GRATE/OTHER UNITS DESIGNED TO BURN WET BIOMASS/BIOBASED SOLID" SUBCATEGORY]
- (3) For PM (or TSM), averaging is only allowed between units within each of the following subcategories and you may not average across subcategories:
- (i) [N/A THE BOILER IS IN THE "STOKERS/SLOPED GRATE/OTHER UNITS DESIGNED TO BURN WET BIOMASS/BIOBASED SOLID" SUBCATEGORY]
- (ii) [N/A THE BOILER IS IN THE "STOKERS/SLOPED GRATE/OTHER UNITS DESIGNED TO BURN WET BIOMASS/BIOBASED SOLID" SUBCATEGORY]
 - (iii) Stokers/sloped grate/other units designed to burn wet biomass/bio-based solids.
- (iv) [N/A THE BOILER IS IN THE "STOKERS/SLOPED GRATE/OTHER UNITS DESIGNED TO BURN WET BIOMASS/BIOBASED SOLID" SUBCATEGORY]
 - (v) [N/A THE BOILER IS IN THE "STOKERS/SLOPED GRATE/OTHER UNITS DESIGNED TO BURN WET BIOMASS/BIO-



BASED SOLID" SUBCATEGORY

- (vi) [N/A THE BOILER IS IN THE "STOKERS/SLOPED GRATE/OTHER UNITS DESIGNED TO BURN WET BIOMASS/BIOBASED SOLID" SUBCATEGORY]
- (vii) [N/A THE BOILER IS IN THE "STOKERS/SLOPED GRATE/OTHER UNITS DESIGNED TO BURN WET BIOMASS/BIO-BASED SOLID" SUBCATEGORY]
- (viii) [N/A THE BOILER IS IN THE "STOKERS/SLOPED GRATE/OTHER UNITS DESIGNED TO BURN WET BIOMASS/BIO-BASED SOLID" SUBCATEGORY]
- (ix) [N/A THE BOILER IS IN THE "STOKERS/SLOPED GRATE/OTHER UNITS DESIGNED TO BURN WET BIOMASS/BIOBASED SOLID" SUBCATEGORY]
- (x) [N/A THE BOILER IS IN THE "STOKERS/SLOPED GRATE/OTHER UNITS DESIGNED TO BURN WET BIOMASS/BIOBASED SOLID" SUBCATEGORY]
- (xi) [N/A THE BOILER IS IN THE "STOKERS/SLOPED GRATE/OTHER UNITS DESIGNED TO BURN WET BIOMASS/BIOBASED SOLID" SUBCATEGORY]
- (xii) [N/A THE BOILER IS IN THE "STOKERS/SLOPED GRATE/OTHER UNITS DESIGNED TO BURN WET BIOMASS/BIOBASED SOLID" SUBCATEGORY]
- (c) For each existing boiler or process heater in the averaging group, the emission rate achieved during the initial compliance test for the HAP being averaged must not exceed the emission level that was being achieved on April 1, 2013 or the control technology employed during the initial compliance test must not be less effective for the HAP being averaged than the control technology employed on April 1, 2013.
- (d) The averaged emissions rate from the existing boilers and process heaters participating in the emissions averaging option must not exceed 90% of the limits in Table 2 to MACT Subpart DDDDD at all times the affected units are subject to numeric emission limits following the compliance date specified in §63.7495. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 2 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7500, ABOVE]
- (e) You must demonstrate initial compliance according to paragraph (e)(1) or (2), below, using the maximum rated heat input capacity or maximum steam generation capacity of each unit and the results of the initial performance tests or fuel analysis.
- (1) You must use Equation 1a or 1b or 1c, below, to demonstrate that the PM (or TSM), HCI, or mercury emissions from all existing units participating in the emissions averaging option for that pollutant do not exceed the emission limits in Table 2 to MACT Subpart DDDDD. Use Equation 1a if you are complying with the emission limits on a heat input basis; use Equation 1b if you are complying with the emission limits on a steam generation (output) basis; and use Equation 1c if you are complying with the emission limits on a electric generation (output) basis. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 2 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7500, ABOVE]

AveWeightedEmissions = $(1.1) \times [Cn i = 1 (Er \times Hm)] / [Cn i = 1 (Hm)]$ (Equation 1a)

Where:

AveWeightedEmissions = Average weighted emissions for PM (or TSM), HCl, or mercury, in units of pounds per million BTU (lb/mmBTU) of heat input.

C = Symbol used to denote summation.

Er = Emission rate (as determined during the initial compliance demonstration) of PM (or TSM), HCl, or mercury from unit, i, in units of pounds per million BTU (lb/mmBTU) of heat input. Determine the emission rate for PM (or TSM), HCl, or mercury by performance testing according to Table 5 to MACT Subpart DDDDD, or by fuel analysis for HCl or mercury or TSM using the applicable equation in §63.7530(c). [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 5 TO MACT SUBPART



DDDDD ARE LISTED UNDER §63.7520, ABOVE]

Hm = Maximum rated heat input capacity of unit, i, in units of million BTU per hour (mmBTU/hr).

n = Number of units participating in the emissions averaging option.

1.1 = Required discount factor.

AveWeightedEmissions = (1.1) x [Çn i = 1 (Er x HSo)] / [Çn i = 1 (So)] (Equation 1b)

Where:

AveWeightedEmissions = Average weighted emissions for PM (or TSM), HCl, or mercury, in units of pounds per million BTU (lb/mmBTU) of steam output.

C = Symbol used to denote summation.

Er = Emission rate (as determined during the initial compliance demonstration) of PM (or TSM), HCl, or mercury from unit, i, in units of pounds per million BTU (lb/mmBTU) of steam output. Determine the emission rate for PM (or TSM), HCl, or mercury by performance testing according to Table 5 to MACT Subpart DDDDD, or by fuel analysis for HCl or mercury or TSM using the applicable equation in §63.7530(c). If you are taking credit for energy conservation measures from a unit according to §63.7533, use the adjusted emission level for that unit, Eadj, determined according to §63.7533 for that unit. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 5 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7520, ABOVE]

So = Maximum steam output capacity of unit, i, in units of million BTU per hour (mmBTU/hr), as defined in §63.7575.

n = Number of units participating in the emissions averaging option.

1.1 = Required discount factor.

[NOTE: EQUATION 1c IS NOT APPLICABLE SINCE THE BOILER IS NOT DEFINED AS AN EGU]

(2) If you are not capable of determining the maximum rated heat input capacity of one or more boilers that generate steam, you may use Equation 2, below, as an alternative to using Equation 1a, above, to demonstrate that the PM (or TSM), HCI, or mercury emissions from all existing units participating in the emissions averaging option do not exceed the emission limits for that pollutant in Table 2 to MACT Subpart DDDDD that are in pounds per million BTU (lb/mmBTU) of heat input. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 2 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7500, ABOVE]

AveWeightedEmissions = $(1.1) \times [Cn i = 1 (Er \times Sm \times Cfi)] / [Cn i = 1 (Sm \times Cfi)]$ (Equation 2)

Where:

AveWeightedEmissions = Average weighted emission level for PM (or TSM), HCl, or mercury, in units of pounds per million BTU (lb/mmBTU) of heat input.

Q = Symbol used to denote summation.

Er = Emission rate (as determined during the most recent compliance demonstration) of PM (or TSM), HCI, or mercury from unit, i, in units of pounds per million BTU (lb/mmBTU) of heat input. Determine the emission rate for PM (or TSM), HCI, or mercury by performance testing according to Table 5 to MACT Subpart DDDDD, or by fuel analysis for HCI or mercury or TSM using the applicable equation in §63.7530(c). [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 5 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7520, ABOVE]



Sm = Maximum steam generation capacity by unit, i, in units of pounds per hour (lb/hr).

Cfi = Conversion factor, calculated from the most recent compliance test, in units of million BTU (mmBTU) of heat input per pounds (lb) of steam generated for unit, i.

- 1.1 = Required discount factor.
- (f) After the initial compliance demonstration described in paragraph (e), above, you must demonstrate compliance on a monthly basis determined at the end of every month (12 times per year) according to paragraphs (f)(1) through (3), below. The first monthly period begins on the compliance date specified in §63.7495. If the affected source elects to collect monthly data for up to the 11 months preceding the first monthly period, these additional data points can be used to compute the 12-month rolling average in paragraph (f)(3), below.
- (1) For each calendar month, you must use Equation 3a or 3b or 3c, below, to calculate the average weighted emission rate for that month. Use Equation 3a and the actual heat input for the month for each existing unit participating in the emissions averaging option if you are complying with emission limits on a heat input basis. Use Equation 3b and the actual steam generation for the month if you are complying with the emission limits on a steam generation (output) basis. Use Equation 3c and the actual electrical generation for the month if you are complying with the emission limits on an electrical generation (output) basis.

AveWeightedEmissions = $(1.1) \times [Cn i = 1 (Er \times Hb)] / [Cn i = 1 (Hb)]$ (Equation 3a)

Where:

AveWeightedEmissions = Average weighted emission level for PM (or TSM), HCl, or mercury, in units of pounds per million BTU (lb/mmBTU) of heat input, for that calendar month.

C = Symbol used to denote summation.

Er = Emission rate (as determined during the most recent compliance demonstration) of PM (or TSM), HCI, or mercury from unit, i, in units of pounds per million BTU (lb/mmBTU) of heat input. Determine the emission rate for PM (or TSM), HCI, or mercury by performance testing according to Table 5 to MACT Subpart DDDDD, or by fuel analysis for HCI or mercury or TSM according to Table 6 to MACT Subpart DDDDD. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLES 5 & 6 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7520 AND §63.7521, RESPECTIVELY, ABOVE]

Hb = The heat input for that calendar month to unit, i, in units of million BTU (mmBTU).

n = Number of units participating in the emissions averaging option.

1.1 = Required discount factor.

AveWeightedEmissions = $(1.1) \times [Cn i = 1 (Er \times So)] / [Cn i = 1 (So)]$ (Equation 3b)

Where:

AveWeightedEmissions = Average weighted emission level for PM (or TSM), HCl, or mercury, in units of pounds per million BTU (lb/mmBTU) of steam output, for that calendar month.

Ç = Symbol used to denote summation.

Er = Emission rate (as determined during the most recent compliance demonstration) of PM (or TSM), HCI, or mercury from unit, i, in units of pounds per million BTU (lb/mmBTU) of steam output. Determine the emission rate for PM (or TSM), HCI, or mercury by performance testing according to Table 5 to MACT Subpart DDDDD, or by fuel analysis for HCl or mercury or TSM according to Table 6 to MACT Subpart DDDDD. If you are taking credit for energy conservation measures from a unit according to §63.7533, use the adjusted emission level for that unit, Eadj, determined according to §63.7533 for that unit. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLES 5 & 6 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7520



AND §63.7521, RESPECTIVELY, ABOVE]

So = The steam output for that calendar month from unit, i, in units of million BTU (mmBTU), as defined in §63.7575.

n = Number of units participating in the emissions averaging option.

1.1 = Required discount factor.

[NOTE: EQUATION 3c IS NOT APPLICABLE SINCE THE BOILER IS NOT DEFINED AS AN EGU]

(2) If you are not capable of monitoring heat input, you may use Equation 4, below, as an alternative to using Equation 3a, above, to calculate the average weighted emission rate using the actual steam generation from the boilers participating in the emissions averaging option.

AveWeightedEmissions = $(1.1) \times [Cn i = 1 (Er \times Sa \times Cfi)] / [Cn i = 1 (Sa \times Cfi)]$ (Equation 4)

Where:

AveWeightedEmissions = average weighted emission level for PM (or TSM), HCl, or mercury, in units of pounds per million BTU (lb/mmBTU) of heat input for that calendar month.

C = Symbol used to denote summation.

Er = Emission rate (as determined during the most recent compliance demonstration of PM (or TSM), HCl, or mercury from unit, i, in units of pounds per million BTU (lb/mmBTU) of heat input. Determine the emission rate for PM (or TSM), HCl, or mercury by performance testing according to Table 5 to MACT Subpart DDDDD, or by fuel analysis for HCl or mercury or TSM according to Table 6 to MACT Subpart DDDDD. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLES 5 & 6 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7520 AND §63.7521, RESPECTIVELY, ABOVE]

Sa = Actual steam generation for that calendar month by boiler, i, in units of pounds (lb).

Cfi = Conversion factor, as calculated during the most recent compliance test, in units of million BTU (mmBTU) of heat input per pounds (lb) of steam generated for boiler, i.

- 1.1 = Required discount factor.
- (3) Until 12 monthly weighted average emission rates have been accumulated, calculate and report only the average weighted emission rate determined under paragraph (f)(1) or (2), above, for each calendar month. After 12 monthly weighted average emission rates have been accumulated, for each subsequent calendar month, use Equation 5, below, to calculate the 12-month rolling average of the monthly weighted average emission rates for the current calendar month and the previous 11 calendar months.

Eavg = [Cn i = 1 (ERi)]/12 (Equation 5)

Where:

Eavg = 12-month rolling average emission rate, [pounds per million BTU (lb/mmBTU) heat input]

C = Symbol used to denote summation.

ERi = Monthly weighted average, for calendar month "i" [pounds per million BTU (lb/mmBTU) heat input], as calculated by paragraph (f)(1) or (2), above.

(g) You must develop, and submit upon request to the applicable Administrator for review and approval, an implementation plan for emission averaging according to the following procedures and requirements in paragraphs (g)(1) through (4),



below.

- (1) If requested, you must submit the implementation plan no later than 180 days before the date that the facility intends to demonstrate compliance using the emission averaging option.
- (2) You must include the information contained in paragraphs (g)(2)(i) through (vii), below, in your implementation plan for all emission sources included in an emissions average:
- (i) The identification of all existing boilers and process heaters in the averaging group, including for each either the applicable HAP emission level or the control technology installed as of January 31, 2013 and the date on which you are requesting emission averaging to commence;
 - (ii) The process parameter (heat input or steam generated) that will be monitored for each averaging group;
- (iii) The specific control technology or pollution prevention measure to be used for each emission boiler or process heater in the averaging group and the date of its installation or application. If the pollution prevention measure reduces or eliminates emissions from multiple boilers or process heaters, the owner or operator must identify each boiler or process heater:
- (iv) The test plan for the measurement of PM (or TSM), HCl, or mercury emissions in accordance with the requirements in §63.7520;
- (v) The operating parameters to be monitored for each control system or device consistent with §63.7500 and Table 4 to MACT Subpart DDDDD, and a description of how the operating limits will be determined [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 4 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7500, ABOVE];
 - (vi) If you request to monitor an alternative operating parameter pursuant to §63.7525, you must also include:
- (A) A description of the parameter(s) to be monitored and an explanation of the criteria used to select the parameter(s); and
- (B) A description of the methods and procedures that will be used to demonstrate that the parameter indicates proper operation of the control device; the frequency and content of monitoring, reporting, and recordkeeping requirements; and a demonstration, to the satisfaction of the Administrator, that the proposed monitoring frequency is sufficient to represent control device operating conditions; and
- (vii) A demonstration that compliance with each of the applicable emission limit(s) will be achieved under representative operating load conditions. Following each compliance demonstration and until the next compliance demonstration, you must comply with the operating limit for operating load conditions specified in Table 4 to MACT Subpart DDDDD. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 4 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7500, ABOVE]
- (3) If submitted upon request, the Administrator shall review and approve or disapprove the plan according to the following criteria:
 - (i) Whether the content of the plan includes all of the information specified in paragraph (g)(2), above; and
 - (ii) Whether the plan presents sufficient information to determine that compliance will be achieved and maintained.
- (4) The applicable Administrator shall not approve an emission averaging implementation plan containing any of the following provisions:
 - (i) Any averaging between emissions of differing pollutants or between differing sources; or
 - (ii) The inclusion of any emission source other than an existing unit in the same subcategories.
- (h) For a group of two or more existing affected units, each of which vents through a single common stack, you may average PM (or TSM), HCl, or mercury emissions to demonstrate compliance with the limits for that pollutant in Table 2 to MACT



Subpart DDDDD if you satisfy the requirements in paragraph (i) or (j), below. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 2 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7500, ABOVE]

- (i) For a group of two or more existing units in the same subcategory, each of which vents through a common emissions control system to a common stack, that does not receive emissions from units in other subcategories or categories, you may treat such averaging group as a single existing unit for purposes of MACT Subpart DDDDD and comply with the requirements of MACT Subpart DDDDD as if the group were a single unit.
- (j) For all other groups of units subject to the common stack requirements of paragraph (h), above, including situations where the exhaust of affected units are each individually controlled and then sent to a common stack, the owner or operator may elect to:
- (1) Conduct performance tests according to procedures specified in §63.7520 in the common stack if affected units from other subcategories vent to the common stack. The emission limits that the group must comply with are determined by the use of Equation 6, below.

En = [Cn i = 1 (ELi x Hi)]/[Cn i = 1 (Hi)] (Equation 6)

Where:

En = HAP emission limit, pounds per million BTU (lb/mmBTU) or parts per million (ppm).

C = Symbol used to denote summation.

Eli = Appropriate emission limit from Table 2 to MACT Subpart DDDDD for unit i, in units of lb/mmBTU or ppm.

Hi = Heat input from unit i, mmBTU.

- (2) Conduct performance tests according to procedures specified in §63.7520 in the common stack. If affected units and non-affected units vent to the common stack, the non-affected units must be shut down or vented to a different stack during the performance test unless the facility determines to demonstrate compliance with the non-affected units venting to the stack; and
- (3) Meet the applicable operating limit specified in §63.7540 and Table 8 to MACT Subpart DDDDD for each emissions control system (except that, if each unit venting to the common stack has an applicable opacity operating limit, then a single continuous opacity monitoring system may be located in the common stack instead of in each duct to the common stack). [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 8 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7540, BELOW]
- (k) The common stack of a group of two or more existing boilers or process heaters in the same subcategories subject to paragraph (h), above, may be treated as a separate stack for purposes of paragraph (b), above, and included in an emissions averaging group subject to paragraph (b), above.

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7168, Jan. 31, 2013; 80 FR 72809, Nov. 20, 2015]

015 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7525]

Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters.

What are my monitoring, installation, operation, and maintenance requirements?

§63.7525 What are my monitoring, installation, operation, and maintenance requirements?

(a) If your boiler or process heater is subject to a CO emission limit in Tables 1, 2, or 11 through 13 to MACT Subpart DDDDD, you must install, operate, and maintain an oxygen analyzer system, as defined in §63.7575, or install, certify, operate and maintain continuous emission monitoring systems (CEMS) for CO and oxygen (or carbon dioxide (CO2)) according to the procedures in paragraphs (a)(1) through (6), below. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 2 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7500, ABOVE]



- (1) [N/A THE BOILER DOES NOT OPERATE A CO CEMS]
- (2) [N/A THE BOILER DOES NOT OPERATE A CO CEMS]
- (3) [N/A THE BOILER DOES NOT OPERATE A CO CEMS]
- (4) [N/A THE BOILER DOES NOT OPERATE A CO CEMS]
- (5) [N/A THE BOILER DOES NOT OPERATE A CO CEMS]
- (6) [N/A THE BOILER DOES NOT OPERATE A CO CEMS]
- (7) [N/A THE BOILER DOES NOT OPERATE A CO CEMS]
- (b) [N/A THE BOILER IS IN THE "STOKERS/SLOPED GRATE/OTHER UNITS DESIGNED TO BURN WET BIOMASS/BIOBASED SOLID" SUBCATEGORY]
- (c) [N/A THE BOILER IS NOT SUBJECT TO AN OPACITY OPERATING LIMIT]
- (d) If you have an operating limit that requires the use of a CMS other than a PM CPMS or COMS, you must install, operate, and maintain each CMS according to the procedures in paragraphs (d)(1) through (5), below, by the compliance date specified in §63.7495.
- (1) The CMS must complete a minimum of one cycle of operation every 15 minutes. You must have a minimum of four (4) successive cycles of operation, one representing each of the four (4) 15-minute periods in an hour, to have a valid hour of data.
- (2) You must operate the monitoring system as specified in §63.7535(b), and comply with the data calculation requirements specified in §63.7535(c).
- (3) Any 15-minute period for which the monitoring system is out-of-control and data are not available for a required calculation constitutes a deviation from the monitoring requirements. Other situations that constitute a monitoring deviation are specified in §63.7535(d).
- (4) You must determine the 30-day rolling average of all recorded readings, except as provided in §63.7535(c).
- (5) You must record the results of each inspection, calibration, and validation check.
- (e) If you have an operating limit that requires the use of a flow monitoring system, you must meet the requirements in paragraphs (d), above, and (e)(1) through (4), below.
- (1) You must install the flow sensor and other necessary equipment in a position that provides a representative flow.
- (2) You must use a flow sensor with a measurement sensitivity of no greater than 2% of the design flow rate.
- (3) You must minimize, consistent with good engineering practices, the effects of swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.
- (4) You must conduct a flow monitoring system performance evaluation in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.
- (f) If you have an operating limit that requires the use of a pressure monitoring system, you must meet the requirements in paragraphs (d), above, and (f)(1) through (6), below.
- (1) Install the pressure sensor(s) in a position that provides a representative measurement of the pressure (e.g., PM scrubber pressure drop).



- (2) Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion consistent with good engineering practices.
- (3) Use a pressure sensor with a minimum tolerance of 1.27 centimeters of water or a minimum tolerance of 1% of the pressure monitoring system operating range, whichever is less.
- (4) Perform checks at least once each process operating day to ensure pressure measurements are not obstructed (e.g., check for pressure tap pluggage daily).
- (5) Conduct a performance evaluation of the pressure monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.
- (6) If at any time the measured pressure exceeds the manufacturer's specified maximum operating pressure range, conduct a performance evaluation of the pressure monitoring system in accordance with your monitoring plan and confirm that the pressure monitoring system continues to meet the performance requirements in you monitoring plan. Alternatively, install and verify the operation of a new pressure sensor.
- (g) [N/A THE BOILER DOES NOT HAVE AN OPERATING LIMIT REQUIRING A pH MONITORING SYSTEM]
- (h) If you have an operating limit that requires a secondary electric power monitoring system for an electrostatic precipitator (ESP) operated with a wet scrubber, you must meet the requirements in paragraphs (h)(1) and (2), below.
- (1) Install sensors to measure (secondary) voltage and current to the precipitator collection plates.
- (2) Conduct a performance evaluation of the electric power monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.
- (i) [N/A THE BOILER DOES NOT HAVE AN OPERATING LIMIT REQUIRING THE USE OF A MONITORING SYSTEM TO MEASURE SORBENT INJECTION RATE]
- (j) [N/A THE BOILER DOES NOT OPERATE A FABRIC FILTER CONTROL]
- (k) [N/A THE BOILER DOES NOT SATISFY THE DEFINITION OF "LIMITED-USE BOILER"]
- (I) [N/A THE BOILER IS NOT EQUIPPED WITH MERCURY AND/OR HCI CEMS]
- (m) [N/A THE BOILER DOES NOT OPERATE AN SO2 CEMS]

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7171, Jan. 31, 2013; 80 FR 72810, Nov. 20, 2015]

016 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7530]

Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters.

How do I demonstrate initial compliance with the emission limits and work practice standards?

§63.7530 How do I demonstrate initial compliance with the emission limitations, fuel specifications and work practice standards?

- (a) You must demonstrate initial compliance with each emission limit that applies to you by conducting initial performance tests and fuel analyses and establishing operating limits, as applicable, according to §63.7520, paragraphs (b) and (c), below, and Tables 5 and 7 to MACT Subpart DDDDD. The requirement to conduct a fuel analysis is not applicable for units that burn a single type of fuel, as specified by §63.7510(a)(2). If applicable, you must also install, operate, and maintain all applicable CMS (including CEMS, COMS, and CPMS) according to §63.7525. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLES 5 & 7 TO MACT SUBPART DDDDD ARE BOTH LISTED UNDER §63.7520, ABOVE]
- (b) If you demonstrate compliance through performance (stack) testing, you must establish each site-specific operating limit in Table 4 to MACT Subpart DDDDD that applies to you according to the requirements in §63.7520, Table 7 to MACT Subpart DDDDD, and paragraph (b)(4), below, as applicable. You must also conduct fuel analyses according to §63.7521



and establish maximum fuel pollutant input levels according to paragraphs (b)(1) through (3), below, as applicable, and as specified in §63.7510(a)(2). (Note that §63.7510(a)(2) exempts certain fuels from the fuel analysis requirements.) However, if you switch fuel(s) and cannot show that the new fuel(s) does (do) not increase the chlorine, mercury, or TSM input into the unit through the results of fuel analysis, then you must repeat the performance test to demonstrate compliance while burning the new fuel(s). [NOTE: THE APPLICABLE REQUIREMENTS OF TABLES 4 & 7 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7500 AND §63.7520, RESPECTIVELY, ABOVE]

- (1) You must establish the maximum chlorine fuel input (Clinput) during the initial fuel analysis according to the procedures in paragraphs (b)(1)(i) through (iii), below.
- (i) You must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of chlorine.
- (ii) During the fuel analysis for hydrogen chloride, you must determine the fraction of the total heat input for each fuel type burned (Qi) based on the fuel mixture that has the highest content of chlorine, and the average chlorine concentration of each fuel type burned (Ci).
 - (iii) You must establish a maximum chlorine input level using Equation 7, below.

Clinput = $[Cn i = 1 (Ci \times Qi)]$ (Equation 7)

Where:

Clinput = Maximum amount of chlorine entering the boiler or process heater through fuels burned in units of pounds per million BTU (lb/mmBTU).

Ç = Symbol used to denote summation.

Ci = Arithmetic average concentration of chlorine in fuel type, i, analyzed according to §63.7521, in units of pounds per million BTU (lb/mmBTU).

Qi = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest content of chlorine during the initial compliance test. If you do not burn multiple fuel types during the performance testing, it is not necessary to determine the value of this term. Insert a value of "1" for Qi. For continuous compliance demonstration, the actual fraction of the fuel burned during the month should be used.

- n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of chlorine.
- (2) You must establish the maximum mercury fuel input level (Mercuryinput) during the initial fuel analysis using the procedures in paragraphs (b)(2)(i) through (iii), below.
- (i) You must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of mercury.
- (ii) During the compliance demonstration for mercury, you must determine the fraction of total heat input for each fuel burned (Qi) based on the fuel mixture that has the highest content of mercury, and the average mercury concentration of each fuel type burned (HGi).
 - (iii) You must establish a maximum mercury input level using Equation 8, below.

Mercuryinput = $[Cn i = 1 (HGi \times Qi)]$ (Equation 8)

Where:

Mercuryinput = Maximum amount of mercury entering the boiler or process heater through fuels burned in units of pounds per million BTU (lb/mmBTU).



C = Symbol used to denote summation.

HGi = Arithmetic average concentration of mercury in fuel type, i, analyzed according to §63.7521, in units of pounds per million BTU (lb/mmBTU).

Qi = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest mercury content during the initial compliance test. If you do not burn multiple fuel types during the performance test, it is not necessary to determine the value of this term. Insert a value of "1" for Qi. For continuous compliance demonstration, the actual fraction of the fuel burned during the month should be used.

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of mercury.

- (3) If you opt to comply with the alternative TSM limit, you must establish the maximum TSM fuel input (TSM input) for solid or liquid fuels during the initial fuel analysis according to the procedures in paragraphs (b)(3)(i) through (iii), below.
- (i) You must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of TSM.
- (ii) During the fuel analysis for TSM, you must determine the fraction of the total heat input for each fuel type burned (Qi) based on the fuel mixture that has the highest content of TSM, and the average TSM concentration of each fuel type burned (TSMi).
 - (iii) You must establish a maximum TSM input level using Equation 9, below.

 $TSMinput = [Cn i = 1 (TSMi \times Qi)]$ (Equation 9)

Where:

TSMinput = Maximum amount of TSM entering the boiler or process heater through fuels burned in units of pounds per million BTU (lb/mmBTU).

C = Symbol used to denote summation.

TSMi = Arithmetic average concentration of TSM in fuel type, i, analyzed according to §63.7521, in units of pounds per million BTU (lb/mmBTU).

- Qi = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest content of TSM during the initial compliance test. If you do not burn multiple fuel types during the performance testing, it is not necessary to determine the value of this term. Insert a value of "1" for Qi. For continuous compliance demonstration, the actual fraction of the fuel burned during the month should be used.
- n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of TSM.
- (4) You must establish parameter operating limits according to paragraphs (b)(4)(i) through (ix), below. As indicated in Table 4 to MACT Subpart DDDDD, you are not required to establish and comply with the operating parameter limits when you are using a CEMS to monitor and demonstrate compliance with the applicable emission limit for that control device parameter. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 4 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7500, ABOVE]
- (i) [N/A THE BOILER DOES NOT OPERATE A WET ACID GAS (HCI) SCRUBBER CONTROL AS DEFINED BY THIS TABLE SINCE THE SCRUBBER DOES NOT USE AN ALKALINE SLURRY/SOLUTION AS ITS SCRUBBING MEDIA; THE SCRUBBING MEDIA IS A WATER SOLUTION]
 - (ii) [N/A THE BOILER DOES NOT OPERATE A PM CPMS]
 - (iii) For a particulate wet scrubber, you must establish the minimum pressure drop and liquid flow rate as defined in



§63.7575 as your operating limits during the three-run performance test during which you demonstrate compliance with your applicable limit. If you use a wet scrubber and you conduct separate performance tests for PM and TSM emissions, you must establish one set of minimum scrubber liquid flow rate and pressure drop operating limits. If you conduct multiple performance tests, you must set the minimum liquid flow rate and pressure drop operating limits at the higher of the minimum values established during the performance tests.

- (iv) For an electrostatic precipitator (ESP) operated with a wet scrubber, you must establish the minimum total secondary electric power input, as defined in §63.7575, as your operating limit during the three-run performance test during which you demonstrate compliance with your applicable limit. (These operating limits do not apply to ESPs that are operated as dry controls without a wet scrubber.)
 - (v) [N/A THE BOILER DOES NOT OPERATE A DRY SCRUBBER CONTROL]
 - (vi) [N/A THE BOILER DOES NOT OPERATE AN ACTIVATED CARBON INJECTION CONTROL]
 - (vii) [N/A THE BOILER DOES NOT OPERATE A FABRIC FILTER CONTROL]
- (viii) For a minimum oxygen level, if you conduct multiple performance tests, you must set the minimum oxygen level at the lower of the minimum values established during the performance tests.
 - (ix) [N/A THE BOILER DOES NOT OPERATE AN SO2 CEMS]
- (c) If you elect to demonstrate compliance with an applicable emission limit through fuel analysis, you must conduct fuel analyses according to §63.7521 and follow the procedures in paragraphs (c)(1) through (5), below.
- (1) If you burn more than one fuel type, you must determine the fuel mixture you could burn in your boiler or process heater that would result in the maximum emission rates of the pollutants that you elect to demonstrate compliance through fuel analysis.
- (2) You must determine the 90th percentile confidence level fuel pollutant concentration of the composite samples analyzed for each fuel type using the one-sided t-statistic test described in Equation 15, below.

P90 = mean + (SD xt) (Equation 15)

Where:

P90 = 90th percentile confidence level pollutant concentration, in pounds per million BTU (lb/mmBTU).

Mean = Arithmetic average of the fuel pollutant concentration in the fuel samples analyzed according to §63.7521, in units of pounds per million BTU (lb/mmBTU).

- SD = Standard deviation of the mean of pollutant concentration in the fuel samples analyzed according to §63.7521, in units of pounds per million BTU (lb/mmBTU. SD is calculated as the sample standard deviation divided by the square root of the number of samples.
- t = t distribution critical value for 90th percentile (t0.1) probability for the appropriate degrees of freedom (number of samples minus one) as obtained from a t-Distribution Critical Value Table.
- (3) To demonstrate compliance with the applicable emission limit for HCl, the HCl emission rate that you calculate for your boiler or process heater using Equation 16, below, must not exceed the applicable emission limit for HCl.

 $HCI = [Cn i = 1 (Ci90 \times Qi \times 1.028)]$ (Equation 16)

Where:

HCI = HCI emission rate from the boiler or process heater in units of pounds per million BTU (lb/mmBTU).



C = Symbol used to denote summation.

Ci90 = 90th percentile confidence level concentration of chlorine in fuel type, i, in units of pounds per million BTU (lb/mmBTU) as calculated according to Equation 15, above (i.e., P90 value).

Qi = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest content of chlorine. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of "1" for Qi. For continuous compliance demonstration, the actual fraction of the fuel burned during the month should be used.

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of chlorine.

1.028 = Molecular weight ratio of HCl to chlorine.

(4) To demonstrate compliance with the applicable emission limit for mercury, the mercury emission rate that you calculate for your boiler or process heater using Equation 17, below, must not exceed the applicable emission limit for mercury.

Mercury = $[Cn i = 1 (Hgi90 \times Qi)]$ (Equation 17)

Where:

Mercury = Mercury emission rate from the boiler or process heater in units of pounds per million BTU (lb/mmBTU).

Ç = Symbol used to denote summation.

Hgi90 = 90th percentile confidence level concentration of mercury in fuel, i, in units of pounds per million BTU (lb/mmBTU) as calculated according to Equation 15, above (i.e., P90 value).

Qi = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest mercury content. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of "1" for Qi. For continuous compliance demonstration, the actual fraction of the fuel burned during the month should be used.

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest mercury content.

(5) To demonstrate compliance with the applicable emission limit for TSM for solid or liquid fuels, the TSM emission rate that you calculate for your boiler or process heater from solid fuels using Equation 18, below, must not exceed the applicable emission limit for TSM.

Metals = $[Cn i = 1 (TSMi90 \times Qi)]$ (Equation 18)

Where:

Metals = TSM emission rate from the boiler or process heater in units of pounds per million BTU (lb/mmBTU).

C = Symbol used to denote summation.

TSMi90 = 90th percentile confidence level concentration of TSM in fuel, i, in units of pounds per million BTU (lb/mmBTU) as calculated according to Equation 15, above (i.e., P90 value).

Qi = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest TSM content. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of "1" for Qi. For continuous compliance demonstration, the actual fraction of the fuel burned during the month should be used.

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest TSM content.



(d) [Reserved]

- (e) You must include with the Notification of Compliance Status a signed certification that either the energy assessment was completed according to Table 3 to MACT Subpart DDDDD, and that the assessment is an accurate depiction of your facility at the time of the assessment, or that the maximum number of on-site technical hours specified in the definition of energy assessment applicable to the facility has been expended. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 3 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7500, ABOVE]
- (f) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.7545(e).
- (g) [N/A THE BOILER DOES NOT BURN ANY GASEOUS FUELS]
- (h) If you own or operate a unit subject to emission limits in Tables 1 or 2 or 11 through 13 to MACT Subpart DDDDD, you must meet the work practice standard according to Table 3 of MACT Subpart DDDDD. During startup and shutdown, you must only follow the work practice standards according to Nos. 5 and 6 of Table 3 of MACT Subpart DDDDD. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLES 2 & 3 TO MACT SUBPART DDDDD ARE BOTH LISTED UNDER §63.7500, ABOVE]
- (i) [N/A THE BOILER DOES NOT OPERATE AN SO2 CEMS]

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7174, Jan. 31, 2013; 80 FR 72811, Nov. 20, 2015]

017 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7533]

Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters.

Can I use emission credits earned from implementation of energy conservation measures to comply with this subpart?

§63.7533 Can I use efficiency credits earned from implementation of energy conservation measures to comply with MACT Subpart DDDDD?

- (a) If you elect to comply with the alternative equivalent output-based emission limits instead of the heat input-based limits listed in Table 2 to MACT Subpart DDDDD, and you want to take credit for implementing energy conservation measures identified in an energy assessment, you may demonstrate compliance using efficiency credits according to the procedures in this section (§63.7533). You may use this compliance approach for an existing affected boiler for demonstrating initial compliance according to §63.7522(e) and for demonstrating monthly compliance according to §63.7522(f). Owners or operators using this compliance approach must establish an emissions benchmark, calculate and document the efficiency credits, develop an Implementation Plan, comply with the general reporting requirements, and apply the efficiency credit according to the procedures in paragraphs (b) through (f), below. You cannot use this compliance approach for a new or reconstructed affected boiler. Additional guidance from the Department of Energy on efficiency credits is available at: http://www.epa.gov/ttn/atw/boiler/boilerpg.html. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 2 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7500, ABOVE]
- (b) For each existing affected boiler for which you intend to apply emissions credits, establish a benchmark from which emission reduction credits may be generated by determining the actual annual fuel heat input to the affected boiler before initiation of an energy conservation activity to reduce energy demand (i.e., fuel usage) according to paragraphs (b)(1) through (4), below. The benchmark shall be expressed in trillion BTU per year (TBTU/yr) heat input.
- (1) The benchmark from which efficiency credits may be generated shall be determined by using the most representative, accurate, and reliable process available for the source. The benchmark shall be established for a one-year period before the date that an energy demand reduction occurs, unless it can be demonstrated that a different time period is more representative of historical operations.
- (2) Determine the starting point from which to measure progress. Inventory all fuel purchased and generated on-site (offgases, residues) in physical units (mmBTU, million cubic feet (mmCF), etc.).
- (3) Document all uses of energy from the affected boiler. Use the most recent data available.



- (4) Collect non-energy-related facility and operational data to normalize, if necessary, the benchmark to current operations, such as building size, operating hours, etc. If possible, use actual data that are current and timely rather than estimated data.
- (c) Efficiency credits can be generated if the energy conservation measures were implemented after January 1, 2008 and if sufficient information is available to determine the appropriate value of credits.
- (1) The following emission points cannot be used to generate efficiency credits:
- (i) Energy conservation measures implemented on or before January 1, 2008, unless the level of energy demand reduction is increased after January 1, 2008, in which case credit will be allowed only for change in demand reduction achieved after January 1, 2008.
- (ii) Efficiency credits on shut-down boilers. Boilers that are shut down cannot be used to generate credits unless the facility provides documentation linking the permanent shutdown to energy conservation measures identified in the energy assessment. In this case, the bench established for the affected boiler to which the credits from the shutdown will be applied must be revised to include the benchmark established for the shutdown boiler.
- (2) For all points included in calculating emissions credits, the owner or operator shall:
- (i) Calculate annual credits for all energy demand points. Use Equation 19, below, to calculate credits. Energy conservation measures that meet the criteria of paragraph (c)(1), below, shall not be included, except as specified in paragraph (c)(1)(i), below.
- (3) Credits are generated by the difference between the benchmark that is established for each affected boiler, and the actual energy demand reductions from energy conservation measures implemented after January 1, 2008. Credits shall be calculated using Equation 19, below, as follows:
 - (i) The overall equation for calculating credits is:

ECredits = [Çn i = 1 (ElSiactual)] / [Elbaseline] (Equation 19)

Where:

ECredits = Energy Input Savings for all energy conservation measures implemented for an affected boiler, expressed as a decimal fraction of the baseline energy input.

Ç = Symbol used to denote summation.

ElSiactual = Energy Input Savings for each energy conservation measure, i, implemented for an affected boiler, million BTU per year (mmBTU/yr).

Elbaseline = Energy Input baseline for the affected boiler, million BTU per year (mmBTU/yr).

- n = Number of energy conservation measures included in the efficiency credit for the affected boiler.
 - (ii) [Reserved]
- (d) The owner or operator shall develop, and submit for approval upon request by the Administrator, an Implementation Plan containing all of the information required in this paragraph (§63.7533(d)) for all boilers to be included in an efficiency credit approach. The Implementation Plan shall identify all existing affected boilers to be included in applying the efficiency credits. The Implementation Plan shall include a description of the energy conservation measures implemented and the energy savings generated from each measure and an explanation of the criteria used for determining that savings. If requested, you must submit the implementation plan for efficiency credits to the Administrator for review and approval no later than 180 days before the date on which the facility intends to demonstrate compliance using the efficiency credit approach.



- (e) The emissions rate as calculated using Equation 20, below, from each existing boiler participating in the efficiency credit option must be in compliance with the limits in Table 2 to MACT Subpart DDDDD at all times the affected unit is subject to numeric emission limits, following the compliance date specified in §63.7495. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 2 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7500, ABOVE]
- (f) You must use Equation 20, below, to demonstrate initial compliance by demonstrating that the emissions from the affected boiler participating in the efficiency credit compliance approach do not exceed the emission limits in Table 2 to MACT Subpart DDDDD. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 2 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7500, ABOVE]

Eadj = [Em] x [1 - ECredits] (Equation 20)

Where:

Eadj = Emission level adjusted by applying the efficiency credits earned, pounds per million BTU (lb/mmBTU) steam output (or lb per MWh) for the affected boiler.

Em = Emissions measured during the performance test, pounds per million BTU (lb/mmBTU) steam output (or lb per MWh) for the affected boiler.

ECredits = Efficiency credits from Equation 19, above, for the affected boiler.

(g) As part of each compliance report submitted as required under §63.7550, you must include documentation that the energy conservation measures implemented continue to generate the credit for use in demonstrating compliance with the emission limits.

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7178, Jan. 31, 2013; 80 FR 72812, Nov. 20, 2015]

018 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7535]

Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters.

How do I monitor and collect data to demonstrate continuous compliance?

§63.7535 Is there a minimum amount of monitoring data I must obtain?

- (a) You must monitor and collect data according to this section (§63.7535) and the site-specific monitoring plan required by §63.7505(d).
- (b) You must operate the monitoring system and collect data at all required intervals at all times that each boiler or process heater is operating and compliance is required, except for periods of monitoring system malfunctions or out-of-control periods (see 40 CFR §63.8(c)(7)), and required monitoring system quality assurance or control activities, including, as applicable, calibration checks, required zero and span adjustments, and scheduled CMS maintenance as defined in your site-specific monitoring plan. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. You are required to complete monitoring system repairs in response to monitoring system malfunctions or out-of-control periods and to return the monitoring system to operation as expeditiously as practicable.
- (c) You may not use data recorded during periods of startup and shutdown, monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods, or required monitoring system quality assurance or control activities in data averages and calculations used to report emissions or operating levels. You must record and make available upon request results of CMS performance audits and dates and duration of periods when the CMS is out-of-control to completion of the corrective actions necessary to return the CMS to operation consistent with your site-specific monitoring plan. You must use all the data collected during all other periods in assessing compliance and the operation of the control device and associated control system.
- (d) Except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, system accuracy audits,



calibration checks, and required zero and span adjustments), failure to collect required data is a deviation of the monitoring requirements. In calculating monitoring results, do not use any data collected during periods of startup and shutdown, when the monitoring system is out-of-control as specified in your site-specific monitoring plan, while conducting repairs associated with periods when the monitoring system is out-of-control, or while conducting required monitoring system quality assurance or quality control activities. You must calculate monitoring results using all other monitoring data collected while the process is operating. You must report all periods when the monitoring system is out-of-control in your semi-annual report.

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7179, Jan. 31, 2013; 80 FR 72812, Nov. 20, 2015]

019 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7540]

Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters.

How do I demonstrate continuous compliance with the emission limits and work practice standards?

§63.7540 How do I demonstrate continuous compliance with the emission limitations, fuel specifications and work practice standards?

- (a) You must demonstrate continuous compliance with each emission limit in Tables 1 and 2 or 11 through 13 to MACT Subpart DDDDD, the work practice standards in Table 3 to MACT Subpart DDDDD, and the operating limits in Table 4 to MACT Subpart DDDDD that applies to you according to the methods specified in Table 8 to MACT Subpart DDDDD and paragraphs (a)(1) through (19), below. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLES 2, 3 & 4 TO MACT SUBPART DDDDD ARE ALL LISTED UNDER §63.7500, ABOVE; THE APPLICABLE REQUIREMENTS OF TABLE 8 TO MACT SUBPART DDDDD ARE LISTED BELOW]
- (1) Following the date on which the initial compliance demonstration is completed or is required to be completed under §§63.7 and 63.7510, whichever date comes first, operation above the established maximum or below the established minimum operating limits shall constitute a deviation of established operating limits listed in Table 4 of MACT Subpart DDDDD except during performance tests conducted to determine compliance with the emission limits or to establish new operating limits. Operating limits must be confirmed or reestablished during performance tests. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 4 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7500, ABOVE]
- (2) As specified in §63.7555(d), you must keep records of the type and amount of all fuels burned in each boiler or process heater during the reporting period to demonstrate that all fuel types and mixtures of fuels burned would result in either of the following:
- (i) Equal to or lower emissions of HCl, mercury, and TSM than the applicable emission limit for each pollutant, if you demonstrate compliance through fuel analysis.
- (ii) Equal to or lower fuel input of chlorine, mercury, and TSM than the maximum values calculated during the last performance test, if you demonstrate compliance through performance testing.
- (3) If you demonstrate compliance with an applicable HCl emission limit through fuel analysis for a solid or liquid fuel and you plan to burn a new type of solid or liquid fuel, you must recalculate the HCl emission rate using Equation 16 of §63.7530 according to paragraphs (a)(3)(i) through (iii), below. You are not required to conduct fuel analyses for the fuels described in §63.7510(a)(2)(i) through (iii). You may exclude the fuels described in §63.7510(a)(2)(i) through (iii) when recalculating the HCl emission rate.
- (i) You must determine the chlorine concentration for any new fuel type in units of pounds per million BTU (lb/mmBTU), based on supplier data or your own fuel analysis, according to the provisions in your site-specific fuel analysis plan developed according to §63.7521(b).
 - (ii) You must determine the new mixture of fuels that will have the highest content of chlorine.
- (iii) Recalculate the HCl emission rate from your boiler or process heater under these new conditions using Equation 16 of §63.7530. The recalculated HCl emission rate must be less than the applicable emission limit.
 - (4) If you demonstrate compliance with an applicable HCl emission limit through performance testing and you plan to burn



a new type of fuel or a new mixture of fuels, you must recalculate the maximum chlorine input using Equation 7 of §63.7530. If the results of recalculating the maximum chlorine input using Equation 7 of §63.7530 are greater than the maximum chlorine input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in §63.7520 to demonstrate that the HCI emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in §63.7530(b). In recalculating the maximum chlorine input and establishing the new operating limits, you are not required to conduct fuel analyses for and include the fuels described in §63.7510(a)(2)(i) through (iii).

- (5) If you demonstrate compliance with an applicable mercury emission limit through fuel analysis, and you plan to burn a new type of fuel, you must recalculate the mercury emission rate using Equation 17 of §63.7530 according to the procedures specified in paragraphs (a)(5)(i) through (iii), below. You are not required to conduct fuel analyses for the fuels described in §63.7510(a)(2)(i) through (iii). You may exclude the fuels described in §63.7510(a)(2)(i) through (iii) when recalculating the mercury emission rate.
- (i) You must determine the mercury concentration for any new fuel type in units of pounds per million BTU (lb/mmBTU), based on supplier data or your own fuel analysis, according to the provisions in your site-specific fuel analysis plan developed according to §63.7521(b).
 - (ii) You must determine the new mixture of fuels that will have the highest content of mercury.
- (iii) Recalculate the mercury emission rate from your boiler or process heater under these new conditions using Equation 17 of §63.7530. The recalculated mercury emission rate must be less than the applicable emission limit.
- (6) If you demonstrate compliance with an applicable mercury emission limit through performance testing, and you plan to burn a new type of fuel or a new mixture of fuels, you must recalculate the maximum mercury input using Equation 8 of §63.7530. If the results of recalculating the maximum mercury input using Equation 8 of §63.7530 are higher than the maximum mercury input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in §63.7520 to demonstrate that the mercury emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in §63.7530(b). You are not required to conduct fuel analyses for the fuels described in §63.7510(a)(2)(i) through (iii) when recalculating the mercury emission rate.
- (7) [N/A THE BOILER DOES NOT OPERATE A FABRIC FILTER CONTROL]
- (8) [N/A THE BOILER DOES NOT OPERATE A CO CEMS]
- (9) [N/A THE BOILER DOES NOT OPERATE A PM CPMS OR A PM CEMS]
- (10) If your boiler or process heater has a heat input capacity of 10 million BTU per hour (mmBTU/hr) or greater, you must conduct an annual tune-up of the boiler or process heater to demonstrate continuous compliance as specified in paragraphs (a)(10)(i) through (vi), below. You must conduct the tune-up while burning the type of fuel (or fuels in the case of units that routinely burn a mixture) that provided the majority of the heat input to the boiler or process heater over the 12 months prior to the tune-up. This frequency does not apply to limited-use boilers and process heaters, as defined in §63.7575, or units with continuous oxygen trim systems that maintain an optimum air-to-fuel ratio.
- (i) As applicable, inspect the burner and clean or replace any components of the burner as necessary (you may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment;
- (ii) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;



- (iii) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection;
- (iv) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NOx requirement to which the unit is subject;
- (v) Measure the concentrations in the effluent stream of CO in parts per million by volume (ppmv), and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and
- (vi) Maintain on-site and submit, if requested by the Administrator, a report containing the information in paragraphs (a)(10)(vi)(A) through (C), below,
- (A) The concentrations of CO in the effluent stream in parts per million by volume (ppmv), and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;
 - (B) A description of any corrective actions taken as a part of the tune-up; and
- (C) The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.
- (11) [N/A THE BOILER HAS A HEAT INPUT CAPACITY GREATER THAN OR EQUAL TO 10 mmBTU/hr]
- (12) [N/A THE BOILER: IS NOT EQUIPPED WITH A CONTINUOUS OXYGEN TRIM SYSTEM; HAS A HEAT INPUT CAPACITY GREATER THAN 5 mmBTU/hr; AND DOES NOT MEET THE DEFINITION OF "LIMITED-USE BOILER" IN $\S 63.7575$]
- (13) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.
- (14) [N/A THE BOILER DOES NOT OPERATE A MERCURY CEMS]
- (15) [N/A THE BOILER DOES NOT OPERATE AN HCI CEMS]
- (16) If you demonstrate compliance with an applicable TSM emission limit through performance testing, and you plan to burn a new type of fuel or a new mixture of fuels, you must recalculate the maximum TSM input using Equation 9 of §63.7530. If the results of recalculating the maximum TSM input using Equation 9 of §63.7530 are higher than the maximum total selected input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in §63.7520 to demonstrate that the TSM emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in §63.7530(b). You are not required to conduct fuel analyses for the fuels described in §63.7510(a)(2)(i) through (iii). You may exclude the fuels described in §63.7510(a)(2)(i) through (iii) when recalculating the TSM emission rate.
- (17) If you demonstrate compliance with an applicable TSM emission limit through fuel analysis for solid or liquid fuels, and you plan to burn a new type of fuel, you must recalculate the TSM emission rate using Equation 18 of §63.7530 according to the procedures specified in paragraphs (a)(5)(i) through (iii), below. You are not required to conduct fuel analyses for the fuels described in §63.7510(a)(2)(i) through (iii). You may exclude the fuels described in §63.7510(a)(2)(i) through (iii) when recalculating the TSM emission rate.
- (i) You must determine the TSM concentration for any new fuel type in units of pounds per million BTU (lb/mmBTU), based on supplier data or your own fuel analysis, according to the provisions in your site-specific fuel analysis plan developed according to §63.7521(b).
 - (ii) You must determine the new mixture of fuels that will have the highest content of TSM.



- (iii) Recalculate the TSM emission rate from your boiler or process heater under these new conditions using Equation 18 of §63.7530. The recalculated TSM emission rate must be less than the applicable emission limit.
- (18) [N/A THE BOILER DOES NOT OPERATE A PM CPMS]
- (19) [N/A THE BOILER DOES NOT OPERATE A PM CEMS]
- (b) You must report each instance in which you did not meet each emission limit and operating limit in Tables 1 through 4 or 11 through 13 to MACT Subpart DDDDD that apply to you. These instances are deviations from the emission limits or operating limits, respectively, in MACT Subpart DDDDD. These deviations must be reported according to the requirements in §63.7550. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLES 2, 3 & 4 TO MACT SUBPART DDDDD ARE ALL LISTED UNDER §63.7500, ABOVE]
- (c) [N/A THE BOILER IS IN THE "STOKERS/SLOPED GRATE/OTHER UNITS DESIGNED TO BURN WET BIOMASS/BIOBASED SOLID" SUBCATEGORY]
- (d) For startup and shutdown, you must meet the work practice standards according to items 5 and 6 of Table 3 of MACT Subpart DDDDD. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 3 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7500, ABOVE]

[78 FR 7179, Jan. 31, 2013, as amended at 80 FR 72813, Nov. 20, 2015]

Table 8 (Demonstrating Continuous Compliance) to 40 CFR Part 63, Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

As stated in §63.7540, you must show continuous compliance with the emission limitations for each boiler or process heater according to the following:

- (1) [N/A THE BOILER DOES NOT OPERATE A FABRIC FILTER CONTROL]
- (2) [N/A THE BOILER DOES NOT OPERATE A PM CPMS]
- (3) [N/A THE BOILER DOES NOT OPERATE A FABRIC FILTER CONTROL]
- (4) If you must meet the operating limits for wet scrubber pressure drop and liquid flow rate, you must demonstrate continuous compliance by:
- (a) Collecting the pressure drop and liquid flow rate monitoring system data according to §§63.7525 and 63.7535; and
- (b) Reducing the data to 30-day rolling averages; and
- (c) Maintaining the 30-day rolling average pressure drop and liquid flow rate at or above the operating limits established during the performance test according to §63.7530(b).
- (5) [N/A THE BOILER DOES NOT OPERATE A WET ACID GAS (HCI) SCRUBBER CONTROL AS DEFINED BY TABLE 4 TO MACT SUBPART DDDDD SINCE THE SCRUBBER DOES NOT USE AN ALKALINE SLURRY/SOLUTION AS ITS SCRUBBING MEDIA; THE SCRUBBING MEDIA IS A WATER SOLUTION; TABLE 4 TO MACT SUBPART DDDDD IS LISTED UNDER §63.7500, ABOVE]
- (6) [N/A THE BOILER DOES NOT OPERATE A DRY SCRUBBER OR CARBON INJECTION CONTROL]
- (7) If you must meet the operating limits or work practice standards for electrostatic precipitator (ESP) total secondary electric power input, you must demonstrate continuous compliance by:
- (a) Collecting the total secondary electric power input monitoring system data for the ESP according to §§63.7525 and



63.7535; and

- (b) Reducing the data to 30-day rolling averages; and
- (c) Maintaining the 30-day rolling average total secondary electric power input at or above the operating limits established during the performance test according to §63.7530(b).
- (8) If you must meet the operating limits or work practice standards for wet scrubber pressure drop and liquid flow rate, you must demonstrate continuous compliance by:
- (a) Conduct monthly fuel analysis for HCl or mercury or TSM according to Table 6 to MACT Subpart DDDDD [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 6 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7521, ABOVE]; and
- (b) Reduce the data to 12-month rolling averages; and
- (c) Maintain the 12-month rolling average at or below the applicable emission limit for HCl or mercury or TSM in Tables 1 and 2 or 11 through 13 to MACT Subpart DDDDD [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 2 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7500, ABOVE]; and
- (d) Calculate the HCI, mercury, and/or TSM emission rate from the boiler or process heater in units of lb/mmBTU using Equation 15 and Equations 17, 18, and/or 19 in §63.7530.
- (9) If you must meet the operating limits or work practice standards for wet scrubber pressure drop and liquid flow rate, you must demonstrate continuous compliance by:
- (a) Continuously monitor the oxygen content using an oxygen analyzer system according to §63.7525(a). This requirement does not apply to units that install an oxygen trim system since these units will set the trim system to the level specified in §63.7525(a)(7); and
- (b) Reducing the data to 30-day rolling averages; and
- (c) Maintain the 30-day rolling average oxygen content at or above the lowest hourly average oxygen level measured during the CO performance test.
- (10) If you must meet the operating limits or work practice standards for wet scrubber pressure drop and liquid flow rate, you must demonstrate continuous compliance by:
- (a) Collecting operating load data or steam generation data every 15 minutes; and
- (b) Reducing the data to 30-day rolling averages; and
- (c) Maintaining the 30-day rolling average operating load such that it does not exceed 110% of the highest hourly average operating load recorded during the performance test according to §63.7520(c).
- (11) [N/A THE BOILER DOES NOT OPERATE AN SO2 CEMS]

[78 FR 7204, Jan. 31, 2013, as amended at 80 FR 72829, Nov. 20, 2015]

020 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7541]

Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters.

How do I demonstrate continuous compliance under the emission averaging provision?

§63.7541 How do I demonstrate continuous compliance under the emissions averaging provision?

(a) Following the compliance date, the owner or operator must demonstrate compliance with MACT Subpart DDDDD on a continuous basis by meeting the requirements of paragraphs (a)(1) through (5), below.



- (1) For each calendar month, demonstrate compliance with the average weighted emissions limit for the existing units participating in the emissions averaging option as determined in §63.7522(f) and (g).
- (2) [N/A THE BOILER DOES NOT OPERATE A FABRIC FILTER CONTROL; THEREFORE, THERE IS NO APPLICABLE OPACITY LIMIT]
- (3) For each existing unit participating in the emissions averaging option that is equipped with a wet scrubber, maintain the 30-day rolling average parameter values at or above the operating limits established during the most recent performance test.
- (4) For each existing unit participating in the emissions averaging option that has an approved alternative operating parameter, maintain the 30-day rolling average parameter values consistent with the approved monitoring plan.
- (5) For each existing unit participating in the emissions averaging option venting to a common stack configuration containing affected units from other subcategories, maintain the appropriate operating limit for each unit as specified in Table 4 to MACT Subpart DDDDD that applies. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 4 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7500, ABOVE]
- (b) Any instance where the owner or operator fails to comply with the continuous monitoring requirements in paragraphs (a)(1) through (5), above, is a deviation.

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7182, Jan. 31, 2013]

021 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7545]

Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters.

What notifications must I submit and when?

§63.7545 What notifications must I submit and when?

- (a) You must submit to the Administrator all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (6), and 63.9(b) through (h) that apply to you by the dates specified.
- (b) As specified in §63.9(b)(2), if you startup your affected source before January 31, 2013, you must submit an Initial Notification not later than 120 days after January 31, 2013. [NOTE: THE PERMITTEE SUBMITTED THE INITIAL NOTIFICATION TO U.S. EPA AND THE DEPARTMENT VIA A LETTER DATED MARCH 26, 2014 (RECEIVED BY THE DEPARTMENT ON MARCH 31, 2014)]
- (c) [N/A THE BOILER STARTUP OCCURRED BEFORE JANUARY 31, 2013]
- (d) If you are required to conduct a performance test you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin.
- (e) If you are required to conduct an initial compliance demonstration as specified in §63.7530, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii). For the initial compliance demonstration for each boiler or process heater, you must submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of all performance test and/or other initial compliance demonstrations for all boiler or process heaters at the facility according to §63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in paragraphs (e)(1) through (8), below, as applicable. If you are not required to conduct an initial compliance demonstration as specified in §63.7530(a), the Notification of Compliance Status must only contain the information specified in paragraphs (e)(1) and (8), below, and must be submitted within 60 days of the compliance date specified at §63.7495(b). [NOTE: THE NOTIFICATION OF COMPLIANCE STATUS IS DUE NO LATER THAN APRIL 1, 2017]
- (1) A description of the affected unit(s) including identification of which subcategory the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with MACT Subpart DDDDD, description of the fuel(s) burned, including whether the fuel(s) were a secondary material determined by you or the EPA through a petition process to be a non-waste under 40 CFR §241.3, whether the fuel(s) were a secondary material processed from



discarded non-hazardous secondary materials within the meaning of 40 CFR §241.3, and justification for the selection of fuel(s) burned during the compliance demonstration.

- (2) Summary of the results of all performance tests and fuel analyses, and calculations conducted to demonstrate initial compliance including all established operating limits, and including:
- (i) Identification of whether you are complying with the PM emission limit or the alternative total selected metals (TSM) emission limit.
- (ii) Identification of whether you are complying with the output-based emission limits or the heat input-based (i.e., lb/mmBTU or ppm) emission limits.
- (iii) Identification of whether you are complying with the arithmetic mean of all valid hours of data from the previous 30 operating days or of the previous 720 hours. This identification shall be specified separately for each operating parameter.
- (3) A summary of the maximum CO emission levels recorded during the performance test to show that you have met any applicable emission standard in Tables 1, 2, or 11 through 13 to MACT Subpart DDDDD, if you are not using a CO CEMS to demonstrate compliance. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 2 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7500, ABOVE]
- (4) Identification of whether you plan to demonstrate compliance with each applicable emission limit through performance testing, a CEMS, or fuel analysis.
- (5) Identification of whether you plan to demonstrate compliance by emissions averaging and identification of whether you plan to demonstrate compliance by using efficiency credits through energy conservation:
- (i) If you plan to demonstrate compliance by emissions averaging, report the emissions level that was being achieved or the control technology employed on January 31, 2013.
 - (ii) [Reserved]
- (6) A signed certification that you have met all applicable emission limits and work practice standards.
- (7) If you had a deviation from any emission limit, work practice standard, or operating limit, you must also submit a description of the deviation, the duration of the deviation, and the corrective action taken in the Notification of Compliance Status report.
- (8) In addition to the information required in §63.9(h)(2), your Notification of Compliance Status must include the following certification(s) of compliance, as applicable, and signed by a responsible official:
- (i) "This facility completed the required initial tune-up for all of the boilers and process heaters covered by 40 CFR Part 63, Subpart DDDDD, at this site according to the procedures in §63.7540(a)(10)(i) through (vi)."
 - (ii) "This facility has had an energy assessment performed according to §63.7530(e)."
- (iii) Except for units that burn only natural gas, refinery gas, or other gas 1 fuel, or units that qualify for a statutory exemption as provided in Section 129(g)(1) of the Clean Air Act, include the following: "No secondary materials that are solid waste were combusted in any affected unit."
- (f) [N/A THE BOILER DOES NOT BURN NATURAL GAS, REFINERY GAS, OR ANY OTHER GAS 1 FUELS]
- (g) If you intend to commence or recommence combustion of solid waste, you must provide 30 days prior notice of the date upon which you will commence or recommence combustion of solid waste. The notification must identify:
- (1) The name of the owner or operator of the affected source, as defined in §63.7490, the location of the source, the boiler(s) or process heater(s) that will commence burning solid waste, and the date of the notice.



- (2) The currently applicable subcategory under MACT Subpart DDDDD.
- (3) The date on which you became subject to the currently applicable emission limits.
- (4) The date upon which you will commence combusting solid waste.
- (h) If you have switched fuels or made a physical change to the boiler or process heater and the fuel switch or physical change resulted in the applicability of a different subcategory, you must provide notice of the date upon which you switched fuels or made the physical change within 30 days of the switch/change. The notification must identify:
- (1) The name of the owner or operator of the affected source, as defined in §63.7490, the location of the source, the boiler(s) and process heater(s) that have switched fuels and/or were physically changed, and the date of the notice.
- (2) The currently applicable subcategory under MACT Subpart DDDDD.
- (3) The date upon which the fuel switch or physical change occurred.

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7183, Jan. 31, 2013; 80 FR 72814, Nov. 20, 2015]

022 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7550]

Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters.

What reports must I submit and when?

§63.7550 What reports must I submit and when?

- (a) You must submit each report in Table 9 to MACT Subpart DDDDD that applies to you. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 9 TO MACT SUBPART DDDDD ARE LISTED BELOW]
- (b) Unless the EPA Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report, according to paragraph (h), below, by the date in Table 9 to MACT Subpart DDDDD and according to the requirements in paragraphs (b)(1) through (4), below. For units that are subject only to a requirement to conduct subsequent annual, biennial, or 5-year tune-ups according to §63.7540(a)(10), (11), or (12), respectively, and not subject to emission limits or Table 4 operating limits, you may submit only an annual, biennial, or 5-year compliance report, as applicable, as specified in paragraphs (b)(1) through (4), below, instead of a semi-annual compliance report. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 4 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7500, ABOVE]
- (1) The first semi-annual compliance report must cover the period beginning on the compliance date that is specified for each boiler or process heater in §63.7495 and ending on June 30 or December 31, whichever date is the first date that occurs at least 180 days after the compliance date that is specified for your source in §63.7495. If submitting an annual, biennial, or 5-year compliance report, the first compliance report must cover the period beginning on the compliance date that is specified for each boiler or process heater in §63.7495 and ending on December 31 within 1, 2, or 5 years, as applicable, after the compliance date that is specified for your source in §63.7495. [NOTE: THE RELEVANT COMPLIANCE DATE FOR THE BOILER IS JANUARY 31, 2017 PURSUANT TO SECTION E (BOILER MACT 3), CONDITION #001, OF TITLE V OPERATING PERMIT NO. 07-05001]
- (2) The first semi-annual compliance report must be postmarked or submitted no later than July 31 or January 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for each boiler or process heater in §63.7495. The first annual, biennial, or 5-year compliance report must be postmarked or submitted no later than January 31.
- (3) Each subsequent semi-annual compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Annual, biennial, and 5-year compliance reports must cover the applicable 1-, 2-, or 5-year periods from January 1 to December 31.
- (4) Each subsequent semi-annual compliance report must be postmarked or submitted no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period. Annual, biennial, and 5-year compliance reports must be postmarked or submitted no later than January 31.



- (5) For each affected source that is subject to permitting regulations pursuant to Part 70 or Part 71 of Chapter I, and if the permitting authority has established dates for submitting semi-annual reports pursuant to §70.6(a)(3)(iii)(A) or §71.6(a)(3)(iii)(A), you may submit the first and subsequent semi-annual compliance reports according to the dates the permitting authority has established in the permit instead of according to the dates in paragraphs (b)(1) through (4), above. [NOTE: THE FACILITY POSSESSES TITLE V OPERATING PERMIT NO. 07-05001F]
- (c) A compliance report must contain the following information depending on how the facility chooses to comply with the limits set in this rule.
- (1) If the facility is subject to the requirements of a tune-up, you must submit a compliance report with the information in paragraphs (c)(5)(i) through (iii), (xiv) and (xvii), below, and paragraph (c)(5)(iv), below, for limited-use boiler or process heater.
- (2) If you are complying with the fuel analysis, you must submit a compliance report with the information in paragraphs (c)(5)(i) through (iii), (vi), (xi), (xii), (xvii), (xviii), (xviii) and paragraph (d), below.
- (3) If you are complying with the applicable emissions limit with performance testing, you must submit a compliance report with the information in (c)(5)(i) through (iii), (vi), (vii), (vii), (xi), (xi), (xii), (xvii), (xviii) and paragraph (d), below.
- (4) If you are complying with an emissions limit using a CMS, the compliance report must contain the information required in paragraphs (c)(5)(i) through (iii), (v), (vi), (xi) through (xiii), (xv) through (xviii), and paragraph (e), below.
- (5)(i) Company and Facility name and address.
- (ii) Process unit information, emissions limitations, and operating parameter limitations.
- (iii) Date of report and beginning and ending dates of the reporting period.
- (iv) The total operating time during the reporting period.
- (v) If you use a CMS, including CEMS, COMS, or CPMS, you must include the monitoring equipment manufacturer(s) and model number(s) and the date of the last CMS certification or audit.
- (vi) The total fuel use by each individual boiler or process heater subject to an emission limit within the reporting period, including, but not limited to, a description of the fuel, whether the fuel has received a non-waste determination by the EPA or your basis for concluding that the fuel is not a waste, and the total fuel usage amount with units of measure.
- (vii) If you are conducting performance tests once every 3 years consistent with §63.7515(b) or (c), the date of the last 2 performance tests and a statement as to whether there have been any operational changes since the last performance test that could increase emissions.
- (viii) A statement indicating that you burned no new types of fuel in an individual boiler or process heater subject to an emission limit. Or, if you did burn a new type of fuel and are subject to a HCl emission limit, you must submit the calculation of chlorine input, using Equation 7 of §63.7530, that demonstrates that your source is still within its maximum chlorine input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of HCI emission rate using Equation 16 of §63.7530 that demonstrates that your source is still meeting the emission limit for HCI emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel and are subject to a mercury emission limit, you must submit the calculation of mercury input, using Equation 8 of §63.7530, that demonstrates that your source is still within its maximum mercury input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of mercury emission rate using Equation 17 of §63.7530 that demonstrates that your source is still meeting the emission limit for mercury emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel and are subject to a total selected metals (TSM) emission limit, you must submit the calculation of TSM input, using Equation 9 of §63.7530, that demonstrates that your source is still within its maximum TSM input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of TSM emission rate, using Equation 18 of §63.7530, that demonstrates that your source is still meeting the



emission limit for TSM emissions (for boilers or process heaters that demonstrate compliance through fuel analysis).

- (ix) If you wish to burn a new type of fuel in an individual boiler or process heater subject to an emission limit and you cannot demonstrate compliance with the maximum chlorine input operating limit using Equation 7 of §63.7530 or the maximum mercury input operating limit using Equation 8 of §63.7530, or the maximum TSM input operating limit using Equation 9 of §63.7530, you must include in the compliance report a statement indicating the intent to conduct a new performance test within 60 days of starting to burn the new fuel.
- (x) A summary of any monthly fuel analyses conducted to demonstrate compliance according to §§63.7521 and 63.7530 for individual boilers or process heaters subject to emission limits, and any fuel specification analyses conducted according to §§63.7521(f) and 63.7530(g).
- (xi) If there are no deviations from any emission limits or operating limits in MACT Subpart DDDDD that apply to you, a statement that there were no deviations from the emission limits or operating limits during the reporting period.
- (xii) If there were no deviations from the monitoring requirements including no periods during which the CMSs, including CEMS, COMS, and CPMS, were out-of-control as specified in §63.8(c)(7), a statement that there were no deviations and no periods during which the CMS were out-of-control during the reporting period.
- (xiii) If a malfunction occurred during the reporting period, the report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by you during a malfunction of a boiler, process heater, or associated air pollution control device or CMS to minimize emissions in accordance with §63.7500(a)(3), including actions taken to correct the malfunction.
- (xiv) Include the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual, biennial, or 5-year tune-up according to §63.7540(a)(10), (11), or (12) respectively. Include the date of the most recent burner inspection if it was not done annually, biennially, or on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown.
- (xv) If you plan to demonstrate compliance by emissions averaging, certify the emissions level achieved or the control technology employed is no less stringent than the level or control technology contained in the notification of compliance status in §63.7545(e)(5)(i).
 - (xvi) [N/A THE BOILER DOES NOT OPERATE ANY CEMS OR A PM CPMS]
- (xvii) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
- (xviii) For each instance of startup or shutdown, include the information required to be monitored, collected, or recorded according to the requirements of §63.7555(d).
- (d) For each deviation from an emission limit or operating limit in MACT Subpart DDDDD that occurs at an individual boiler or process heater where you are not using a CMS to comply with that emission limit or operating limit, or from the work practice standards for periods of startup and shutdown, the compliance report must additionally contain the information required in paragraphs (d)(1) through (3), below.
- (1) A description of the deviation and which emission limit, operating limit, or work practice standard from which you deviated.
- (2) Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken.
- (3) If the deviation occurred during an annual performance test, provide the date the annual performance test was completed.
- (e) For each deviation from an emission limit, operating limit, and monitoring requirement in MACT Subpart DDDDD



occurring at an individual boiler or process heater where you are using a CMS to comply with that emission limit or operating limit, the compliance report must additionally contain the information required in paragraphs (e)(1) through (9), below. This includes any deviations from your site-specific monitoring plan as required in §63.7505(d).

- (1) The date and time that each deviation started and stopped and description of the nature of the deviation (i.e., what you deviated from).
- (2) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.
- (3) The date, time, and duration that each CMS was out-of-control, including the information in §63.8(c)(8).
- (4) The date and time that each deviation started and stopped.
- (5) A summary of the total duration of the deviation(s) during the reporting period and the total duration as a percent of the total source operating time during that reporting period.
- (6) A characterization of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.
- (7) A summary of the total duration of CMS downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period.
- (8) A brief description of the source for which there was a deviation.
- (9) A description of any changes in CMSs, processes, or controls since the last reporting period for the source for which there was a deviation.
- (f)-(g) [Reserved]
- (h) You must submit the reports according to the procedures specified in paragraphs (h)(1) through (3), below.
- (1) Within 60 days after the date of completing each performance test (as defined in §63.2) required by MACT Subpart DDDDD, you must submit the results of the performance tests, including any fuel analyses, following the procedure specified in either paragraph (h)(1)(i) or (ii), below.
- (i) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT Web site (http://www.epa.gov/ttn/chief/ert/index.html), you must submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (https://cdx.epa.gov/). Performance test data must be submitted in a file format generated through use of the EPA's ERT or an electronic file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT Web site. If you claim that some of the performance test information being submitted is confidential business information (CBI), you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT Web site, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA's CDX as described earlier in this paragraph.
- (ii) For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT Web site at the time of the test, you must submit the results of the performance test to the Administrator at the appropriate address listed in §63.13.
- (2) [N/A THE BOILER DOES NOT OPERATE ANY CEMS]
- (3) You must submit all reports required by Table 9 of MACT Subpart DDDDD electronically to the EPA via the CEDRI. CEDRI can be accessed through the EPA's CDX. You must use the appropriate electronic report in CEDRI for MACT Subpart DDDDD. Instead of using the electronic report in CEDRI for MACT Subpart DDDDD, you may submit an alternate



electronic file consistent with the XML schema listed on the CEDRI Web site (http://www.epa.gov/ttn/chief/cedri/index.html), once the XML schema is available. If the reporting form specific to MACT Subpart DDDDD is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate address listed in §63.13. You must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI.

[78 FR 7183, Jan. 31, 2013, as amended at 80 FR 72814, Nov. 20, 2015]

Table 9 (Reporting Requirements) to 40 CFR Part 63, Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

As stated in §63.7550, you must comply with the following requirements for reports:

- (1) You must submit a semi-annual* compliance report that must contain the following:
- (a) Information required in §63.7550(c)(1) through (5), above; and
- (b) If there are no deviations from any emission limitation (emission limit and operating limit) that applies to you and there are no deviations from the requirements for work practice standards for periods of startup and shutdown in Table 3 to MACT Subpart DDDDD that apply to you, a statement that there were no deviations from the emission limitations and work practice standards during the reporting period. If there were no periods during which the CMSs, including continuous emissions monitoring system (CEMS), continuous opacity monitoring system (COMS), and operating parameter monitoring systems, were out-of-control as specified in §63.8(c)(7), a statement that there were no periods during which the CMSs were out-of-control during the reporting period; and
- (c) If you have a deviation from any emission limitation (emission limit and operating limit) where you are not using a CMS to comply with that emission limit or operating limit, or a deviation from a work practice standard for periods of startup and shutdown, during the reporting period, the report must contain the information in §63.7550(d), above; and
- (d) If there were periods during which the CMSs, including CEMS, COMS, and operating parameter monitoring systems, were out-of-control as specified in §63.8(c)(7), or otherwise not operating, the report must contain the information in §63.7550(e), above.
- * Unless the EPA Administrator has approved a different schedule for submission of reports under §63.10(a)

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7205, Jan. 31, 2013; 80 FR 72830, Nov. 20, 2015]

023 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7555]

Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters.

What records must I keep?

§63.7555 What records must I keep?

- (a) You must keep records according to paragraphs (a)(1) and (2), below.
- (1) A copy of each notification and report that you submitted to comply with MACT Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semi-annual compliance report that you submitted, according to the requirements in §63.10(b)(2)(xiv).
- (2) Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in §63.10(b)(2)(viii).
- (3) [N/A THE BOILER IS NOT IN THE "LIMITED USE" SUBCATEGORY]
- (b) For each CEMS, COMS, and continuous monitoring system (CMS) you must keep records according to paragraphs (b)(1) through (5), below.



- (1) Records described in §63.10(b)(2)(vii) through (xi).
- (2) [N/A THE BOILER DOES NOT OPERATE A PM COMS]
- (3) Previous (i.e., superseded) versions of the performance evaluation plan as required in §63.8(d)(3).
- (4) [N/A THE BOILER DOES NOT OPERATE A CEMS]
- (5) Records of the date and time that each deviation started and stopped.
- (c) You must keep the records required in Table 8 to MACT Subpart DDDDD including records of all monitoring data and calculated averages for applicable operating limits, such as opacity, pressure drop, pH, and operating load, to show continuous compliance with each emission limit and operating limit that applies to you. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 8 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7540, ABOVE]
- (d) For each boiler or process heater subject to an emission limit in Tables 1, 2, or 11 through 13 to MACT Subpart DDDDD, you must also keep the applicable records in paragraphs (d)(1) through (13), below. [NOTE: THE APPLICABLE REQUIREMENTS OF TABLE 2 TO MACT SUBPART DDDDD ARE LISTED UNDER §63.7500, ABOVE]
- (1) You must keep records of monthly fuel use by each boiler or process heater, including the type(s) of fuel and amount(s) used.
- (2) If you combust non-hazardous secondary materials that have been determined not to be solid waste pursuant to §241.3(b)(1) and (2), you must keep a record that documents how the secondary material meets each of the legitimacy criteria under §241.3(d)(1). If you combust a fuel that has been processed from a discarded non-hazardous secondary material pursuant to §241.3(b)(4), you must keep records as to how the operations that produced the fuel satisfy the definition of "processing" in §241.2. If the fuel received a non-waste determination pursuant to the petition process submitted under §241.3(c), you must keep a record that documents how the fuel satisfies the requirements of the petition process. For operating units that combust non-hazardous secondary materials as fuel per §241.4, you must keep records documenting that the material is listed as a non-waste under §241.4(a). Units exempt from the incinerator standards under §129(g)(1) of the Clean Air Act because they are qualifying facilities burning a homogeneous waste stream do not need to maintain the records described in this paragraph.
- (3) A copy of all calculations and supporting documentation of maximum chlorine fuel input, using Equation 7 of §63.7530, that were done to demonstrate continuous compliance with the HCl emission limit, for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of HCl emission rates, using Equation 16 of §63.7530, that were done to demonstrate compliance with the HCl emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum chlorine fuel input or HCl emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate chlorine fuel input, or HCl emission rate, for each boiler and process heater.
- (4) A copy of all calculations and supporting documentation of maximum mercury fuel input, using Equation 8 of §63.7530, that were done to demonstrate continuous compliance with the mercury emission limit for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of mercury emission rates, using Equation 17 of §63.7530, that were done to demonstrate compliance with the mercury emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum mercury fuel input or mercury emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate mercury fuel input, or mercury emission rates, for each boiler and process heater.
- (5) If, consistent with §63.7515(b), you choose to performance (stack) test less frequently than annually, you must keep a record that documents that your emissions in the previous performance (stack) test(s) were less than 75% of the applicable emission limit (or, in specific instances noted in Tables 1 and 2 or 11 through 13 to MACT Subpart DDDDD, less than the applicable emission limit), and document that there was no change in source operations including fuel composition and operation of air pollution control equipment that would cause emissions of the relevant pollutant to increase within the past year.



- (6) Records of the occurrence and duration of each malfunction of the boiler or process heater, or of the associated air pollution control and monitoring equipment.
- (7) Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in §63.7500(a)(3), including corrective actions to restore the malfunctioning boiler or process heater, air pollution control, or monitoring equipment to its normal or usual manner of operation.
- (8) A copy of all calculations and supporting documentation of maximum total selected metals (TSM) fuel input, using Equation 9 of §63.7530, that were done to demonstrate continuous compliance with the TSM emission limit for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of TSM emission rates, using Equation 18 of §63.7530, that were done to demonstrate compliance with the TSM emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum TSM fuel input or TSM emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate TSM fuel input, or TSM emission rates, for each boiler and process heater.
- (9) You must maintain records of the calendar date, time, occurrence and duration of each startup and shutdown.
- (10) You must maintain records of the type(s) and amount(s) of fuels used during each startup and shutdown.
- (11) For each startup period, for units selecting paragraph (2) of the definition of "startup" in §63.7575, you must maintain records of the time that clean fuel combustion begins; the time when you start feeding fuels that are not clean fuels; the time when useful thermal energy is first supplied; and the time when the PM controls are engaged.
- (12) If you choose to rely on paragraph (2) of the definition of "startup" in §63.7575, for each startup period, you must maintain records of the hourly steam temperature, hourly steam pressure, hourly steam flow, hourly flue gas temperature, and all hourly average CMS data (e.g., CEMS, PM CPMS, COMS, ESP total secondary electric power input, scrubber pressure drop, scrubber liquid flow rate) collected during each startup period to confirm that the control devices are engaged. In addition, if compliance with the PM emission limit is demonstrated using a PM control device, you must maintain records as specified in paragraphs (d)(12)(i) through (iii), below.
- (i) For a boiler or process heater with an electrostatic precipitator (ESP), record the number of fields in service, as well as each field's secondary voltage and secondary current during each hour of startup.
 - (ii) [N/A THE BOILER DOES NOT OPERATE A FABRIC FILTER CONTROL]
- (iii) For a boiler or process heater with a wet scrubber needed for filterable PM control, record the scrubber's liquid flow rate and the pressure drop during each hour of startup.
- (13) If you choose to use paragraph (2) of the definition of "startup" in §63.7575 and you find that you are unable to safely engage and operate your PM control(s) within one (1) hour of first firing of non-clean fuels, you may choose to rely on paragraph (1) of definition of "startup" in §63.7575 or you may submit to the delegated permitting authority a request for a variance with the PM controls requirement, as described below.
 - (i) The request shall provide evidence of a documented manufacturer-identified safety issue.
- (ii) The request shall provide information to document that the PM control device is adequately designed and sized to meet the applicable PM emission limit.
 - (iii) In addition, the request shall contain documentation that:
- (A) The unit is using clean fuels to the maximum extent possible to bring the unit and PM control device up to the temperature necessary to alleviate or prevent the identified safety issues prior to the combustion of primary fuel;
 - (B) The unit has explicitly followed the manufacturer's procedures to alleviate or prevent the identified safety issue; and
 - (C) Identifies with specificity the details of the manufacturer's statement of concern.



- (iv) You must comply with all other work practice requirements, including but not limited to data collection, recordkeeping, and reporting requirements.
- (e) If you elect to average emissions consistent with §63.7522, you must additionally keep a copy of the emission averaging implementation plan required in §63.7522(g), all calculations required under §63.7522, including monthly records of heat input or steam generation, as applicable, and monitoring records consistent with §63.7541.
- (f) If you elect to use efficiency credits from energy conservation measures to demonstrate compliance according to §63.7533, you must keep a copy of the Implementation Plan required in §63.7533(d) and copies of all data and calculations used to establish credits according to §63.7533(b), (c), and (f).
- (g) [N/A THE BOILER DOES NOT BURN ANY GASEOUS FUELS AND IS IN THE "STOKERS/SLOPED GRATE/OTHER UNITS DESIGNED TO BURN WET BIOMASS/BIO-BASED SOLID" SUBCATEGORY]
- (h) [N/A THE BOILER DOES NOT BURN ANY GASEOUS FUELS AND IS IN THE "STOKERS/SLOPED GRATE/OTHER UNITS DESIGNED TO BURN WET BIOMASS/BIO-BASED SOLID" SUBCATEGORY]

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7185, Jan. 31, 2013; 80 FR 72816, Nov. 20, 2015]

024 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7560]

Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters.

In what form and how long must I keep my records?

§63.7560 In what form and how long must I keep my records?

- (a) Your records must be in a form suitable and readily available for expeditious review, according to §63.10(b)(1).
- (b) As specified in §63.10(b)(1), you must keep each record for five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- (c) You must keep each record on site, or they must be accessible from on-site (for example, through a computer network), for at least two (2) years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). You can keep the records off-site for the remaining three (3) years.

025 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7565]

Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters.

What parts of the General Provisions apply to me?

§63.7565 What parts of the General Provisions apply to me?

Table 10 to MACT Subpart DDDDD shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

026 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7575]

Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters.

What definitions apply to this subpart?

Terms used in 40 CFR Part 63, Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, as well as Section E, Group "BOILER MACT 3", are defined in the Clean Air Act (CAA); in 40 CFR §63.2 (General Provisions); and in 40 CFR §63.7575.

APPVION INC/SPRING MILL



SECTION F. Alternative Operation Requirements.

No Alternative Operations exist for this Plan Approval facility.

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SECTION G. Emission Restriction Summary.

No emission restrictions listed in this section of the permit.



APPVION INC/SPRING MILL



SECTION H. Miscellaneous.

NOTE: The capacities/throughputs listed in Section A are for informational use only and should not be used as enforceable limitations.

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***** End of Report *****